

# STIC Search Report

# STIC Database Tracking Number.

TO: Callie Shosho

Location:

**Art Unit: 1714** 

September 4, 2003

Case Serial Number: 10/001347

From: Kathleen Fuller Location: EIC 1700

CP3/4 3D62

Phone: 308-4290

Kathleen.Fuller@uspto.gov

Search Notes	



# STIC Search Results Feedback Form

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_					-	
_	4 77				7 1	

Questions about the scope or the results of the search? Contact the EIC searcher or contact:

Kathleen Fuller, EIC 1700 Team Leader 308-4290, CP3/4-3D62

/olur	ntary Results Feedback Form					
	m an examiner in Workgroup: Example: 1713 elevant prior art <b>found</b> , search results used as follows:					
	102 rejection					
	103 rejection					
	Cited as being of interest.					
	Helped examiner better understand the invention.					
	Helped examiner better understand the state of the art in their technology.					
	Types of relevant prior art found:					
	☐ Foreign Patent(s)					
	<ul> <li>Non-Patent Literature         (journal articles, conference proceedings, new product announcements etc.)     </li> </ul>					
> Re	elevant prior art <b>not found:</b>					
	Results verified the lack of relevant prior art (helped determine patentability).					
	Results were not useful in determining patentability or understanding the invention.					
Comn	nents:					

Drop off or send completed forms to STIC/EIC1700 CP3/4 3D62



Access DB# 10086

## **SEARCH REQUEST FORM**

### Scientific and Technical Information Center

Requester's Full Name: Call.  Art Unit: Phone No Mail Box and Bldg/Room Location:	imber 30 2 - 0 2 0 3	Examiner #: Date:  Serial Number: \( \cup \)			
If more than one search is submit	tted, please prioritize	e searches in order of need.			
Please provide a detailed statement of the se Include the elected species or structures, ke utility of the invention. Define any terms the known. Please attach a copy of the cover sh	earch topic, and describe as ywords, synonyms, acrony nat may have a special mea leet, pertinent claims, and a	s specifically as possible the subject matter to be searched.  Important the concept or season of the season of the concept or season.  Important the concept of the concep			
Title of Invention: Nwel	Tioner (	unipositions to, Black Grandere Int			
Inventors (please provide full names):	Raynish	2 millaw			
Earliest Priority Filing Date:	126/01				
		arent, child, divisional, or issued patent numbers) along with the			
10: 1 0/20	ne find a	ravore (cologiavore) ente			
or claim 1)		2 . Lucy exhibits			
Michi Conterns Do	Thieric Co	Torand which exhabits  50 Gronn. Colorand contains			
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1 ly lone old	alvis - cally	Cole Saist = 1 (1)			
, , ,	- 1. 7 5 1				
` \	~ /( 11/8				
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nas polymenc.	violet color	ant, oxivane, methyl-, polymer 21- ((3-methyl-4-(d-kmino			
'^ / 'A	$\alpha \sim \omega \cup \tau \vee \tau \vee \tau$	α, υ·			
t- methyl - 3,5-acc	garrist	3			
	<b>.</b>	Control Comparising			
or claims of sta	- Chellas	tance component Coquivalent to			
regiment and/or due	La hasila	we angle and color			
characteristics (at	(,b*) as set	Forth withe claims			
STAFF USE ONLY Masure	Type of Search	Vendors and cost where applicable Thank			
Searcher: 2. Fully the chroma	NA Sequence (#)	STN JUN			
Searcher Phone #:	AA Sequence (#)	Dialog			
Searcher Location:	Structure (#)	Questel/Orbit			
Date Searcher Picked Up	Bibliographic	Dr.Link			
Date Completed: 4/04/03	Litigation	Lexis/Nexis			
earcher Prep & Review Time: 50 Fulltext Sequence Systems					
Clerical Prep Time: Online Time: 35	Other	Other (specify)			
PTO-1590 (8-01)					

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=> D OUE L44
             1 SEA FILE=REGISTRY ABB=ON 515857-23-5/BI
L26
         375045 SEA FILE=REGISTRY ABB=ON 16.145/RID
L27
                                         75-56-9/CRN
         18356 SEA FILE=REGISTRY ABB=ON
L28
         22522 SEA FILE=REGISTRY ABB=ON 75-21-8/CRN
L29
L30
         14494 SEA FILE=REGISTRY ABB=ON L28 AND L29
            29 SEA FILE=REGISTRY ABB=ON L30 AND L27
L31
             2 SEA FILE=HCAPLUS ABB=ON L26
L35
            10 SEA FILE=HCAPLUS ABB=ON L31
L36
             2 SEA FILE=HCAPLUS ABB=ON (L35 OR L36) AND (TONER# OR INK#)
L42
             O SEA FILE=HCAPLUS ABB=ON (L35 OR L36) AND (HUE(3A)ANGLE? OR
L43
               BRIGHTNESS OR LIGHT (3A) ABSORP?)
             2 SEA FILE=HCAPLUS ABB=ON L42 OR L43
L44
=> D L44 ALL 1-2 HITSTR
L44 ANSWER 1 OF 2 HCAPLUS COPYRIGHT 2003 ACS on STN
     2003:356497 HCAPLUS
AΝ
DN
     138:370279
     Novel toner compounds and compositions for black offset
TΤ
ΙN
     Batlaw, Rajnish
    Milliken & Company, USA
PA
     PCT Int. Appl., 27 pp.
SO
     CODEN: PIXXD2
DT
     Patent
LΑ
     English
     ICM C08G018-72
TC
     ICS C08G018-50; C08G018-02; C09D011-10
     41-8 (Dyes, Organic Pigments, Fluorescent Brighteners, and Photographic
     Sensitizers)
     Section cross-reference(s): 42, 74
FAN.CNT 1
     PATENT NO.
                    KIND DATE
                                         APPLICATION NO. DATE
                     ____
     _____
                                          ______
     WO 2003037951
                    A1 20030508
                                        WO 2002-US29398 20020916
PΤ
         W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN,
             CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,
             GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR,
             LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH,
             PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,
             UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU,
            TJ, TM
         RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG,
             CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,
             PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR,
            NE, SN, TD, TG
     US 2003110977
                           20030619
                                         US 2001-1351
                                                           20011026
                     A1
     US 2003130375
                           20030710
                                         US 2001-999231
                                                           20011026
                      A1
PRAI US 2001-1351
                           20011026
                      Α
     US 2001-999231
                      Α
                           20011026
     A novel colorant compd. is provided which is the addn. product of an org.
AΒ
     chromophore having at least one reactive hydroxyl or amine substituent, a
     mono- or polyisocyanate, and/or an alc. Such a compd. provides soly. in
     oil-based ink compns., complete water resistance and excellent
     oil based ink compns. Furthermore, such colorants provide an
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easy and efficient way to tone shades of oil based inks. In

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addn., such colorants provide a way to tone carbon black based lithog. inks that gives the images a appearance of jet black on various types of printing substrates. Thus, 70 parts of a polymeric blue colorant [methylium, bis(4-aminophenyl)(4-aminophenyl)-, chloride, ethoxylated (.apprx.4-10 mol), propoxylated (.apprx.4-10 mol)], having a Color Value of 65, were charged to a 3-neck flask. Added to this formulation were 80 parts of octadecyl isocyanate and 1.5 parts of dibutyltin dilaurate (catalyst). The mixt. was then heated to 70-80.degree. for 2-6 h or until the reaction is complete. The absence (disappearance) of a peak at about 2275 cm-1 (NCO) and the appearance (or increase in magnitude) of peaks at about 1740-1680 cm-1 and about 1540-1530 cm-1 corresponding to urethane frequencies was used to confirm this.

- ST black offset ink toner colorant urethane deriv polymer
- IT Carbon black, uses

RL: TEM (Technical or engineered material use); USES (Uses) (1K01967; manuf. of toner compds. and compns. for black offset inks)

IT Inks

(lithog.; manuf. of toner compds. and compns. for black offset inks)

IT Dyes

(manuf. of toner compds. and compns. for black offset

IT Polyurethanes, preparation

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(polyoxyalkylene-, chromophore-based; manuf. of toner compds. and compns. for black offset inks)

IT Chromophores

(urethane compds.; manuf. of toner compds. and compns. for black offset inks)

IT 112-96-9DP, Octadecyl isocyanate, urethane compds. with OH or amine group-contg. dye compds. 4955-92-4DP, Tris(p-aminophenyl)carbonium chloride, reaction products with ethylene oxide-propylene oxide copolymer and isocyanates 9003-11-6DP, Ethylene oxide-propylene oxide copolymer, reaction products with tris(p-aminophenyl)carbonium chloride and isocyanates 58067-42-8DP, Tetramethylxylylene diisocyanate, reaction products with ethoxylated propoxylated tris(p-aminophenyl)carbonium chloride and isocyanates 515857-23-5DP, reaction products with monoisocyanates 521959-42-2P 521959-43-3P

#### 521959-44-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manuf. of toner compds. and compns. for black offset inks)

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD RE

- (1) Batlaw; US 5919846 A 1999 HCAPLUS
- (2) Harris; US 5973062 A 1999 HCAPLUS
- (3) Meinhardt; US 6329453 B1 2001 HCAPLUS
- (4) Stephens; US 6077927 A 2000 HCAPLUS
- IT 515857-23-5DP, reaction products with monoisocyanates

#### 521959-42-2P 521959-43-3P 521959-44-4P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(manuf. of toner compds. and compns. for black offset inks)

RN 515857-23-5 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 5-[[4-[bis(2-hydroxyethyl)amino]-2-methylphenyl]azo]-3-methyl-2,4-thiophenedicarbonitrile (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 96422-09-2 CMF C18 H19 N5 O2 S

сн<sub>2</sub>-- сн<sub>2</sub>-- он

NC S N= N 
$$CH_2-CH_2-OH$$

Me CN Me

CM 2

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9 CMF C3 H6 O

СН3

CM 4

CRN 75-21-8 CMF C2 H4 O

0

RN 521959-42-2 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 5-[[4-[bis(2-hydroxyethyl)amino]-2-methylphenyl]azo]-3-methyl-2,4-thiophenedicarbonitrile (2:1), polymer with bis(1-isocyanato-1-methylethyl)benzene (9CI) (CA INDEX NAME)

CM 1

CRN 58067-42-8

CMF C14 H16 N2 O2 CCI IDS

CM 2

CRN 515857-23-5

CMF C18 H19 N5 O2 S . 2 (C3 H6 O . C2 H4 O)  $\times$ 

CM 3

CRN 96422-09-2

CMF C18 H19 N5 O2 S

$$\begin{array}{c} \text{CH}_2-\text{CH}_2-\text{OH} \\ \text{N}-\text{CH}_2-\text{CH}_2-\text{OH} \\ \text{N}-\text{CH}_2-\text{CH}_2-\text{OH} \\ \\ \text{Me} \end{array}$$

CM 4

CRN 9003-11-6

CMF (C3 H6 O  $\cdot$  C2 H4 O) x

CCI PMS

CM 5

CRN 75-56-9 CMF C3 H6 O

О .: . . СНЗ

CM 6

CRN 75-21-8 CMF C2 H4 O

RN 521959-43-3 HCAPLUS

Oxirane, methyl-, polymer with oxirane, ether with 5-[[4-[bis(2-hydroxyethyl)aminoj-2-methylphenyl]azo]-3-methyl-2,4-thiophenedicarbonitrile (2:1), polymer with bis(1-isocyanato-1-methylethyl)benzene and 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 58067-42-8 CMF C14 H16 N2 O2 CCI IDS



D1

CM 2

CRN 4098-71-9 CMF C12 H18 N2 O2

CM 3

CRN 515857-23-5

CMF C18 H19 N5 O2 S . 2 (C3 H6 O . C2 H4 O) x

CM 4

CRN 96422-09-2 CMF C18 H19 N5 O2 S

CM 5

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 6

CRN 75-56-9 CMF C3 H6 O

CM 7

CRN 75-21-8 CMF C2 H4 O

0

RN 521959-44-4 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 5-[[4-[bis(2-hydroxyethyl)amino]-2-methylphenyl]azo]-3-methyl-2,4-thiophenedicarbonitrile (2:1), polymer with 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethylcyclohexane (9CI) (CA INDEX NAME)

CM 1

CRN 4098-71-9 CMF C12 H18 N2 O2

Me Me

CM 2

CRN 515857-23-5

CMF C18 H19 N5 O2 S . 2 (C3 H6 O . C2 H4 O) x

CM 3

CRN 96422-09-2

CMF C18 H19 N5 O2 S

$${\rm CH_2}-{\rm CH_2}-{\rm OH}$$

$$N - CH_2 - CH_2 - OH$$
 $N - CH_2 - CH_2 - OH$ 
 $N - CH_2 - CH_2 - OH$ 
 $N - CH_2 - CH_2 - OH$ 
 $N - CH_2 - CH_2 - OH$ 

CM 4

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 5

CRN 75-56-9

CMF C3 H6 O

CM 6

CRN 75-21-8

CMF C2 H4 O

0

```
L44 ANSWER 2 OF 2 HCAPLUS COPYRIGHT 2003 ACS on STN
    2003:334432 HCAPLUS
AN
    138:339815
DN
    Novel toner compositions for black gravure inks for
TΙ
     textiles, polymeric films, and papers
     Batlaw, Rajnish
ΙN
PΑ
     USA
SO
    U.S. Pat. Appl. Publ., 6 pp.
     CODEN: USXXCO
DT
    Patent
T.A
    English
ΙC
    ICM B32B027-14
NCL 428195000
     42-12 (Coatings, Inks, and Related Products)
     Section cross-reference(s): 40
FAN.CNT 1
                                         APPLICATION NO. DATE
     PATENT NO. KIND DATE
                           _____
     -----
                     ____
                                          _____
    US 2003082349 A1
                           20030501
                                         US 2001-1347 20011026
PRAI US 2001-1347
                           20011026
     A novel, easy, and efficient manner of toning shades of toluene-based
     gravure inks is provided, particularly through the incorporation
     of certain polymeric colorants therein the gravure ink
     formulations. In addn., such toner additives provide a toning
     capabilities of carbon black-based gravure inks that provides
     jetter black appearances with lower degrees of redness and bronzing on
     various types of printing substrates than other toner
     formulations of std. alkali blue types of toning additives.
                                                                 Such printed
     substrates and methods of printing utilizing such novel gravure
     toner additives are also encompassed within this invention. Thus,
     a toluene-based ink was prepd. by admixing polymeric violet
     colorant ethoxylated propoxylated 2,2'-(3-methyl-4-(2-amino-4-methyl-3,5-
     dicyanothiophene)azo-phenyl-imino)bisethanol 15 parts, coated vanish 280
     parts, Black Conc. (carbon black) 120 parts, and toluene 285 parts.
ST
     toner compn black gravure ink
IΤ
        (gravure; prodn. of toner compns. for black gravure
        inks for textiles, polymeric films, and papers)
ΙT
     Coloring materials
        (polymeric; prodn. of toner compns. for black gravure
        inks for textiles, polymeric films, and papers)
IT
     Polyoxyalkylenes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (prodn. of toner compns. for black gravure inks for
        textiles, polymeric films, and papers)
ΙT
     Paper
     Plastic films
     Textiles
        (substrate; prodn. of toner compns. for black gravure
       inks for textiles, polymeric films, and papers)
ΙT
     515857-23-5
     RL: TEM (Technical or engineered material use); USES (Uses)
```

(polymeric violet colorant; prodn. of **toner** compns. for black gravure **inks** for textiles, polymeric films, and papers)

IT 515857-23-5

RL: TEM (Technical or engineered material use); USES (Uses) (polymeric violet colorant; prodn. of toner compns. for black gravure inks for textiles, polymeric films, and papers)

RN 515857-23-5 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 5-[[4-[bis(2-hydroxyethyl)amino]-2-methylphenyl]azo]-3-methyl-2,4-thiophenedicarbonitrile (2:1) (9CI) (CA INDEX NAME)

CM 1

CRN 96422-09-2 CMF C18 H19 N5 O2 S

CM 2

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) x

CCI PMS

CM 3

CRN 75-56-9 CMF C3 H6 O

CH<sub>3</sub>

CM 4

CRN 75-21-8 CMF C2 H4 O

0

```
=> D QUE
             1 SEA FILE=REGISTRY ABB=ON 515857-23-5/BI
L26
        375045 SEA FILE=REGISTRY ABB=ON 16.145/RID
L27
         18356 SEA FILE=REGISTRY ABB=ON 75-56-9/CRN
L28
         22522 SEA FILE=REGISTRY ABB=ON 75-21-8/CRN
L29
         14494 SEA FILE=REGISTRY ABB=ON L28 AND L29
L30
            29 SEA FILE=REGISTRY ABB=ON L30 AND L27
L31
            2 SEA FILE=HCAPLUS ABB=ON L26
L35
            10 SEA FILE=HCAPLUS ABB=ON L31
L36
             2 SEA FILE=HCAPLUS ABB=ON (L35 OR L36) AND (TONER# OR INK#)
L42
             O SEA FILE=HCAPLUS ABB=ON (L35 OR L36) AND (HUE(3A)ANGLE? OR
L43
               BRIGHTNESS OR LIGHT (3A) ABSORP?)
             2 SEA FILE=HCAPLUS ABB=ON L42 OR L43
L44
        347382 SEA FILE=REGISTRY ABB=ON 16.145.3/RID
T.46
        347382 SEA FILE=REGISTRY ABB=ON L46 OR L46
L47
       177386 SEA FILE=REGISTRY RAN=(,247262-99-0) ABB=ON L46 OR L46
L49
       169996 SEA FILE=REGISTRY ABB=ON L47 NOT L49
L50
         27634 SEA FILE=HCAPLUS ABB=ON L30
L51
         85504 SEA FILE=HCAPLUS ABB=ON L49
L52
         9074 SEA FILE=HCAPLUS ABB=ON L50
L53
           128 SEA FILE=HCAPLUS ABB=ON L51 AND (L52 OR L53)
L54
            7 SEA FILE=HCAPLUS ABB=ON L54 AND INK#
L55
             5 SEA FILE=HCAPLUS ABB=ON (L55 OR L44) NOT L44
L56
=> D L56 ALL 1-5 HITSTR
L56 ANSWER 1 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
    2000:464546 HCAPLUS
AN
DN
    133:90837
    Water-thinned jet ink compositions for printing high quality
TI
    images on various papers
    Malhotra, Shadi L.; Mayo, James D.; Breton, Marcel P.
TN
PΑ
    Xerox Corp., USA
    U.S., 18 pp.
SO
    CODEN: USXXAM
DT
    Patent
LA English
    ICM C09D011-00
NCL 106031430
    42-12 (Coatings, Inks, and Related Products)
FAN.CNT 1
    PATENT NO.
                   KIND DATE
                                        APPLICATION NO. DATE
     _____
                                         _____
    US 6086661 A 20000711
                                        US 1999-300210 19990427
PRAI US 1999-300210
                         19990427
    An aq. ink compn. is comprised of (1) a dye fixing quaternary
    compd. selected from (a) imidazolinium quaternary salts, (b) phosphonium
    quaternary salts, and (c) an ammonium quaternary salt, (2) a liq.
    ink vehicle, (3) a paper-curl reducing compd., (4) a lightfastness
    component, (5) a lightfastness antioxidant, (6) a substantially water-sol.
    org. salt or a substantially water-sol. inorg. salt, (7) a biocide, and
     (8) a colorant.
ST
    acoustic jet printing aq ink; color printing jet ink;
    dye fixative jet ink; quaternary salt fixative jet ink
    ; waterfast lightfast jet printing ink
    Quaternary ammonium compounds, uses
TT
    RL: TEM (Technical or engineered material use); USES (Uses)
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(dihydrogenated tallow alkyl; fast-drying ink compns. for
        printing high quality images on various papers)
ΙT
     Quaternary ammonium compounds, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (ethyldimethylsoya alkyl, Et sulfates; fast-drying ink
        compns. for printing high quality images on various papers)
ΙΤ
     Pigments, nonbiological
        (fast-drying ink compns. for printing high quality images on
        various papers)
     Phosphonium compounds
ΙΤ
     RL: TEM (Technical or engineered material use); USES (Uses)
        (fast-drying ink compns. for printing high quality images on
        various papers)
ΙT
     Onium compounds
     RL: TEM (Technical or engineered material use); USES (Uses)
        (imidazolium compds., tallow; fast-drying ink compns. for
       printing high quality images on various papers)
ΙT
     Inks
        (jet-printing, water-thinned; fast-drying ink compns. for
        printing high quality images on various papers)
ΙT
     Carbon black, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (pigment; fast-drying ink compns. for printing high quality
        images on various papers)
     88-24-4, 2,2'-Methylenebis(6-tert-butyl-4-ethylphenol)
TT
     2,6-Di-tert-butyl-.alpha.-dimethylamino-4-cresol 103-96-8
                                                                  119-47-1,
                                                      3081-14-9
     2,2'-Methylenebis(6-tert-butyl-4-methylphenol)
                                                                  17629-30-0,
     D-Raffinose pentahydrate
                                28600-84-2
                                           33145-10-7, 2,2'-Isobutylidene-
     bis (4,6-dimethyl phenol)
                                41539-22-4, N-(1,3-Dimethylbutyl)-N'-phenyl-
     phenylene diamine
                        121246-28-4
     RL: TEM (Technical or engineered material use); USES (Uses)
        (antioxidant; fast-drying ink compns. for printing high
        quality images on various papers)
                                             13590-97-1, Dodecyl guanidine
IT
     6317-18-6, Methylene bis(thiocyanate)
     hydrochloride
                    21564-17-0, 2-(Thio cyanomethyl thio)benzothiazole
     30388-01-3, 2-Hydroxypropylmethane thiosulfonate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (biocide; fast-drying ink compns. for printing high quality
        images on various papers)
ΙT
     220107-67-5, Monaguat ISIES
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye fixative, Monaguat ISIES; fast-drying ink compns. for
        printing high quality images on various papers)
ΙT
     1100-88-5, Benzyl triphenyl phosphonium chloride 2001-45-8, Tetra phenyl
     phosphonium chloride
                           3010-24-0
                                       4762-26-9, Hexyl triphenyl phosphonium
             14866-42-3, Stearyl tributyl phosphonium bromide 14937-45-2,
     Hexadecyl tributyl phosphonium bromide 15510-55-1, Dodecyl triphenyl
     phosphonium bromide 51812-80-7 54063-35-3
                                                   62705-16-2, Sanac C
                                 69891-92-5, 2-[(1,3-Dioxan-2-
     67633-58-3, Schercoquat IIB
     yl)ethyl]triphenyl phosphonium bromide
                                            70206-24-5 70340-04-4,
     2-Hydroxybenzyl triphenyl phosphonium bromide 71067-22-6, Schercoquat
           82105-88-2, (4-Ethoxybenzyl)triphenyl phosphonium bromide 92888-3
     7-4, Varisoft 222LT
                         132268-32-7, Tomah Q 17-2 146346-92-1,
     4-Butoxybenzyl triphenyl phosphonium bromide
                                                  161069-06-3
                                                                 282093-16-7,
     Sanac S
              282093-22-5, Schercoquat SOAS
     RL: TEM (Technical or engineered material use); USES (Uses)
        (dye fixative; fast-drying ink compns. for printing high
        quality images on various papers)
```

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ΙΤ
     65816-20-8
     RL: TEM (Technical or engineered material use); USES (Uses)
        (lightfastness component, Givsorb UV 2; fast-drying ink
        compns. for printing high quality images on various papers)
ΙT
     25805-17-8, Poly(2-ethyl-2-oxazoline)
                                            65447-77-0 90751-07-8
     196696-82-9
     RL: TEM (Technical or engineered material use); USES (Uses)
        (lightfastness component; fast-drying ink compns. for
        printing high quality images on various papers)
     81-13-0, Pantothenol 544-62-7, 3-Octadecyloxy-1,2-propanediol
ΙT
     1606-85-5, 1,4-Bis(2-hydroxy ethoxy)-2-butyne
                                                    4847-93-2,
                                  6425-32-7, 3-Morpholino-1,2-propanediol
     3-Piperidino-1,2-propanediol
     17131-52-1, 3-(4-Methoxy phenoxy)-1,2-propanediol
                                                        28132-01-6,
     4-8-Bis(hydroxymethyl) tricyclo [5.2.1.02.6] decane
     Polyethylene glycol Triethanolamine ether 58205-99-5
     85391-19-1, 3-Pyrrolidino-1,2-propanediol
     RL: TEM (Technical or engineered material use); USES (Uses)
        (paper curl reducing agent; fast-drying ink compns. for
        printing high quality images on various papers)
     105-08-8, 1,4-Cyclohexanedimethanol
                                         107-21-1, Ethylene glycol, uses
ΤT
     108-32-7, Propylene carbonate 111-46-6, Di(ethylene glycol), uses
     111-48-8, 2,2'-Thiodiethanol
                                   112-34-5, Di(ethylene glycol) butyl ether
     112-73-2, Diethylene glycol dibutyl ether 126-33-0, Tetramethylene
     sulfone 492-97-7, 2,2'-Bithiophene
                                        616-45-5, 2-Pyrrolidinone
                                             2580-77-0, 2,2'-Sulfonyldiethanol
     1125-99-1, 1-Pyrrolidino-1-cyclohexene
     2687-94-7, 1-Octyl-2-pyrrolidinone 6837-24-7, 1-Cyclohexyl-2-
                    42032-30-4, 1-Decyl-2-methyl-imidazole
     pyrrolidinone
     RL: TEM (Technical or engineered material use); USES (Uses)
        (vehicle; fast-drying ink compns. for printing high quality
        images on various papers)
     77-86-1, Tris(hydroxymethyl) aminomethane 919-16-4, Trilithium citrate
ΙT
     1132-61-2, 4-Morpholinepropanesulfonic acid
                                                  2044-56-6, Lithium Dodecyl
              5324-84-5, Sodium 1-octane sulfonate
                                                     7365-45-9,
     sulfate
     4-(2-Hydroxyethyl)-1-piperazine ethane sulfonic acid 7446-20-0, Zinc
     sulfate heptahydrate 7550-35-8, Lithium bromide
                                                        7647-14-5, Sodium
     chloride, uses
                    7681-11-0, Potassium iodide, uses 7758-02-3, Potassium
     bromide, uses
                   10025-70-4, Strontium chloride hexahydrate
                                                                10101-41-4,
     Calcium sulfate dihydrate 10191-18-1, N,N-Bis(2-hydroxyethyl)-2-amino
     ethane sulfonic acid
                          10196-18-6, Zinc nitrate hexahydrate 13446-18-9,
    Magnesium nitrate hexahydrate
                                    13477-34-4, Calcium nitrate tetrahydrate
     68399-77-9
                 83081-75-8
                              145224-94-8
     RL: TEM (Technical or engineered material use); USES (Uses)
        (water-sol.; fast-drying ink compns. for printing high
        quality images on various papers)
RE.CNT
             THERE ARE 25 CITED REFERENCES AVAILABLE FOR THIS RECORD
(1) Cooke; US 5041161 1991 HCAPLUS
(2) El-Sayed; US 5382492 1995 HCAPLUS
(3) Guiles; US 4791439 1988
(4) Gundlach; US 6001899 1999 HCAPLUS
(5) Hadimioglu; US 5111220 1992
(6) Hadimoglu; US 5121141 1992
(7) Itoh; US 5690721 1997 HCAPLUS
(8) Koike; US 4853036 1989 HCAPLUS
(9) Koike; US 5124718 1992 HCAPLUS
(10) Lin; US 5531818 1996 HCAPLUS
(11) Lu; US 3985663 1976 HCAPLUS
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(12) Malhotra; US 5709737 1998 HCAPLUS

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10/001347
                   9/4/03 Page 13
SHOSH0
(13) Pearlstine; US 5518534 1996 HCAPLUS
(14) Pontes; US 5700316 1997 HCAPLUS
(15) Rezanka; US 5371531 1994
(16) Sacripante; US 5667568 1997 HCAPLUS
(17) Sacripante; US 5698017 1997 HCAPLUS
(18) Sakai; US 5698128 1997
(19) Schwarz; US 4840674 1989 HCAPLUS
(20) Schwarz; US 5006170 1991 HCAPLUS
(21) Schwarz; US 5122187 1992 HCAPLUS
(22) Spehrley; US 4751528 1988
(23) Taniguchi; US 5667572 1997 HCAPLUS
(24) Vaught; US 4490731 1984
(25) Vieira; US 5098477 1992 HCAPLUS
     58205-99-5
ΙT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (paper curl reducing agent; fast-drying ink compns. for
        printing high quality images on various papers)
     58205-99-5 HCAPLUS
RN
     Oxirane, methyl-, polymer with oxirane, ether with 2,2-bis(hydroxymethyl)-
CN
     1,3-propanediol (4:1) (9CI) (CA INDEX NAME)
     CM
     CRN 115-77-5
     CMF C5 H12 O4
        CH2 - OH
но-сн2-с-сн2-он
        {\tt CH_2}-{\tt OH}
     CM
          2
     CRN
          9003-11-6
     CMF
          (C3 H6 O . C2 H4 O)x
     CCI
          PMS
          CM
               3
          CRN 75-56-9
          CMF C3 H6 O
     CH3
          CM
               4
```

CRN 75-21-8

C2 H4 O

CMF

0

IT **492-97-7**, 2,2'-Bithiophene

RL: TEM (Technical or engineered material use); USES (Uses) (vehicle; fast-drying ink compns. for printing high quality images on various papers)

RN 492-97-7 HCAPLUS

CN 2,2'-Bithiophene (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



L56 ANSWER 2 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:609683 HCAPLUS

DN 127:285874

TI Simulated photographic-quality prints using plasticizer to reduce curl

IN Malhotra, Shadi L.

PA Xerox Corp., USA

SO U.S., 20 pp.

CODEN: USXXAM

DT Patent

LA English

IC ICM G03G013-14

NCL 430097000

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

FAN.CNT 1

	PATENT NO.		DATE	APPLICATION NO.	DATE	
PΙ	US 5665504	Α	19970909	US 1996-584784	19960111	
	JP 09281737	A2	19971031	JP 1997-1317	19970108	
PRAI	US 1996-584784		19960111			

AB Simulated photog.-quality prints are created using nonphotog. imaging such as xerog. and ink-jet printing. Reverse or wrong reading toner images are formed on a transparent substrate which is adhered to a coated backing sheet. The backing sheet is coated with a polymer material which serves as an adhesive and has a glass transition temp. less than 55.degree.. A hydrophilic polymer coating having a m.p. greater than 50.degree. and a toner plasticizer having a m.p. less than 75.degree. contacting the adhesive polymer serves as a wetting agent for providing an enhanced optical interface as well as protection for the adhesive polymer which has a lower m.p. than the adhesive polymer.

ST simulated photog print plasticizer curl prevention

IT Polysulfones, uses

Polysulfones, uses

RL: TEM (Technical or engineered material use); USES (Uses) (polyether-; simulated photog.-quality prints contg.)

IT Polyethers, uses

Polyethers, uses

RL: TEM (Technical or engineered material use); USES (Uses) (polysulfone-; simulated photog.-quality prints contg.)

```
ΙΤ
    Cellophane
        (simulated photog.-quality prints contg.)
ΙT
    Aminoplasts
    Clays, uses
     Polycarbonates, uses
     Polyesters, uses
     Polyimides, uses
     Polyoxyalkylenes, uses
     Polysulfones, uses
     Rubber, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (simulated photog.-quality prints contg.)
ΙT
    Electrophotography
      Ink-jet printing
     Photography
       (simulated photog.-quality prints using plasticizers to reduce curl)
     88-15-3, 2-Acetylthiophene 88-24-4, 2,2'-Methylenebis(6-tert-
ΙT
    butyl-4-ethylphenol)
                          88-27-7
                                   102-01-2, Acetoacetanilide
     .epsilon.-Caprolactam, uses 110-02-1, Thiophene 119-47-1,
     2,2'-Methylenebis(6-tert-butyl-4-methylphenol)
                                                   123-28-4, Didodecyl
     3,3'-thiodipropionate 128-53-0, N-Ethylmaleimide 142-26-7,
                           350-03-8, 3-Acetylpyridine
                                                       471-34-1, Calcium
    N-Acetylethanolamine
                     517-23-7, 2-Acetylbutyrolactone 576-15-8,
     carbonate, uses
                     616-45-5, 2-Pyrrolidinone 673-66-5
                                                           675-20-7,
     1-Acetylindole
                         693-36-7, Dioctadecyl 3,3'-thiodipropionate
     .delta.-Valerolactam
     874-23-7, 2-Acetylcyclohexanone 930-21-2, 2-Azetidinone
     2-Acetyl-1-methylpyrrole 932-62-7, 3-Acetyl-1-methylpyrrole 932-66-1,
     1-Acetyl-1-cyclohexene 1001-53-2, N-Acetylethylenediamine 1068-57-1,
                     1071-73-4, 3-Acetyl-1-propanol
    Acetic hydrazide
                                                      1121-07-9,
    N-Methylsuccinimide 1122-54-9, 4-Acetylpyridine
                                                       1122-62-9,
                     1123-19-9
                                  1190-73-4, N-Acetylcysteamine
     2-Acetylpyridine
                                                                 1314-13-2,
                       1314-23-4, Zirconium oxide, uses 1314-98-3, Zinc
     Zinc oxide, uses
     sulfide, uses
                  1333-52-4, Acetonaphthone 1344-28-1D, Alumina, hydrated
     1432-43-5, 3-Acetyl-2-oxazolidinone 1443-80-7, 4-Acetylbenzonitrile
     1497-19-4, .alpha.-Methyl-.alpha.-propylsuccinimide 1696-20-4,
     4-Acetylmorpholine 1709-70-2, 1,3,5-Trimethyl-2,4,6-tris(3,5-di-tert-
    butyl-4-hydroxybenzyl)benzene 1843-05-6
                                              1888-91-1, N-Acetylcaprolactam
    2235-00-9, N-Vinylcaprolactam 2530-10-1, 3-Acetyl-2,5-
    dimethylthiophene 2556-73-2, N-Methylcaprolactam
                                                        2628-16-2,
     4-Acetoxystyrene 2973-09-3, N-Butylmaleimide
                                                   3128-06-1,
     4-Acetylbutyric acid 3168-90-9, 1-Acetyl-2-methyl-1-cyclopentene
               4593-16-2, 1-Acetyl-3-methylpiperidine 5022-29-7,
     4173-74-4
    N-Ethylphthalimide 5323-50-2, N-Propylphthalimide 5460-29-7,
    N-(3-Bromopropyl)phthalimide 5977-14-0, Acetoacetamide 6090-09-1,
     4-Acetyl-1-methylcyclohexene 6310-09-4, 2-Acetyl-5-
     chlorothiophene 7631-86-9, Silica, uses 7727-43-7, Barium sulfate
     7789-75-5, Calcium fluoride, uses 9002-86-2, Poly(vinyl chloride)
     9002-88-4, Polyethylene 9003-07-0, Polypropylene 9003-08-1,
    Formaldehyde-melamine copolymer 9003-09-2, Poly(vinyl methyl ether)
     9003-11-6, Ethylene oxide-propylene oxide copolymer 9003-17-2,
     Polybutadiene 9003-18-3, Acrylonitrile-butadiene copolymer 9003-20-7,
                                                                9003-27-4,
    Vinyl acetate homopolymer 9003-21-8, Poly(methyl acrylate)
     Poly(isobutylene) 9003-28-5, Poly(1-butene) 9003-31-0, Polyisoprene
     9003-32-1, Poly(ethyl acrylate) 9003-44-5, Poly(isobutyl vinyl ether)
                                    9003-53-6, Polystyrene 9003-55-8,
     9003-49-0, Poly(butyl acrylate)
    Butadiene-styrene copolymer 9003-56-9, Acrylonitrile-butadiene-styrene
     copolymer 9003-63-8, Poly(butyl methacrylate) 9003-77-4,
     Poly(2-ethylhexyl acrylate) 9003-95-6, Poly(vinyl stearate)
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Ethylcellulose 9006-26-2, Ethylene-maleic anhydride copolymer 9010-79-1, Ethylene-propylene copolymer 9010-85-9, Isobutylene-isoprene 9010-86-0, Ethylene-ethyl acrylate copolymer 9010-98-4, copolymer Polychloroprene 9011-05-6, Urea-formaldehyde copolymer 9011-16-9, Maleic anhydride-vinyl methyl ether copolymer 9011-53-4, Butyl methacrylate-isobutyl methacrylate copolymer 9012-09-3, Cellulose triacetate 9020-32-0, Poly(ethylene naphthalate) 9020-73-9 9036-63-9, Poly(isooctyl acrylate) 10101-39-0 10595-72-9, Ditridecyl 3,3'-thiodipropionate 13463-67-7, Titanium dioxide, uses 13889-98-0, 1-Acetylpiperazine 16432-81-8 16545-54-3 16713-80-7 17216-08-9, 2-Acetyl-1-tetralone 24936-97-8, Poly(1,4-butylene adipate) 24937-05-1, Poly(ethylene adipate) 24937-78-8, Ethylene-vinyl acetate 24938-37-2, Poly(ethylene adipate) 24969-10-6, Epichlorohydrin-ethylene oxide copolymer 24979-82-6, Poly(propyl acrylate) 24981-14-4, Poly(vinyl fluoride) 25035-78-3, Poly(diallyl 25035-84-1, Poly(vinyl propionate) 25036-21-9, isophthalate) Poly(benzyl acrylate) 25037-78-9, Ethylene-vinyl chloride copolymer 25053-15-0, Poly(diallyl phthalate) 25087-17-6, Poly(hexyl methacrylate) 25103-87-1, Poly(1,4-butylene adipate) 25153-40-6, Maleic acid-vinyl methyl ether copolymer 25232-27-3, Poly(tert-butyl acrylate) 25249-16-5, Poly(2-hydroxyethyl methacrylate) 25266-02-8, Maleic anhydride-1-octadecene copolymer 25266-13-1, Poly(octyl acrylate) 25322-68-3, Poly(ethylene oxide) 25569-53-3, Poly(ethylene succinate) 25609-74-9, Poly(propyl methacrylate) 25639-21-8, Poly(octadecyl 25667-11-2, Poly(ethylene succinate) methacrylate) 25719-51-1, 25719-52-2, Poly(lauryl methacrylate) Poly(2-ethylhexyl methacrylate) 25805-17-8, Poly(2-ethyl-2-oxazoline) 25986-77-0, Poly(octadecyl 26022-14-0, Poly(2-hydroxyethyl acrylate) acrylate) 26124-32-3, Poly(isopropyl acrylate) 26246-92-4, Poly(lauryl acrylate) 26715-88-8, Poly(vinyl pivalate) 26716-20-1, tert-Butylaminoethyl methacrylate 26760-99-6, Poly(ethylene azelate) 26762-07-2, homopolymer Poly(ethylene azelate) 27103-47-5, Poly(hexyl acrylate) 27458-65-7, 27516-89-8 28158-21-6, Poly(trimethylene Poly(cyclohexyl acrylate) 28265-35-2, Butadiene-maleic acid copolymer 28628-64-0, succinate) Poly(2-methoxyethyl acrylate) 28725-67-9, Poly(trimethylene succinate) 29500-86-5, Poly(decyl 28725-68-0 29320-53-4, Poly(decyl methacrylate) 29963-76-6, Poly[2-(4-benzoyl-3-hydroxyphenoxy)ethyl acrylate] acrylate) 32161-06-1, 1-Acetyl-4-piperidone 33512-26-4, Diethyl (phthalimidomethyl) phosphonate 36221-42-8, Poly(trimethylene adipate) 37200-12-7, Poly(isodecyl 36568-42-0, Poly(trimethylene adipate) methacrylate) 38205-60-6, 5-Acetyl-2,4-dimethylthiazole 40601-76-1 49805-30-3, (.+-.)-2-Azabicyclo[2.2.1]hept-5-en-3-one 52234-59-0, Poly(trimethylene glutarate) 52256-48-1, Poly(trimethylene glutarate) 54771-60-7 54841-40-6, Poly(isodecyl acrylate) 62501-03-5, Poly(hydroxypropyl acrylate) 66987-22-2, Poly(vinyl neodecanoate) 67845-93-6, Hexadecyl 3,5-di-tert-butyl-4-hydroxybenzoate Hydroxyethylcellulose methacrylate 78902-09-7, Phthalimidoacetaldehyde 79720-19-7 82451-48-7, N,N-Bis(2,2,6,6-tetramethyl-4diethylacetal piperidinyl)-1,6-hexanediamine-2,4-dichloro-6-morpholino-1,3,5-triazine 106917-30-0 106917-31-1 111483-45-5, Hydroxyethylcellulose copolymer 122269-49-2, Ethylene oxide-isoprene block copolymer acrylate 145332-37-2, Ethylene oxide-2-hydroxyethyl methacrylate block copolymer 196696-82-9 196696-83-0, Ethylene oxide-2-hydroxypropyl methacrylate 196696-84-1, Ethylene oxide-ionene block copolymer block copolymer RL: TEM (Technical or engineered material use); USES (Uses) (simulated photog.-quality prints contg.)

88-15-3, 2-Acetylthiophene 110-02-1, Thiophene 2530-10-1, 3-Acetyl-2,5-dimethylthiophene 6310-09-4,

ΙT

2-Acetyl-5-chlorothiophene **9003-11-6**, Ethylene oxide-propylene oxide copolymer

RL: TEM (Technical or engineered material use); USES (Uses) (simulated photog.-quality prints contg.)

RN 88-15-3 HCAPLUS

CN Ethanone, 1-(2-thienyl)- (9CI) (CA INDEX NAME)

RN 110-02-1 HCAPLUS

CN Thiophene (8CI, 9CI) (CA INDEX NAME)

RN 2530-10-1 HCAPLUS

CN Ethanone, 1-(2,5-dimethyl-3-thienyl)- (9CI) (CA INDEX NAME)

RN 6310-09-4 HCAPLUS

CN Ethanone, 1-(5-chloro-2-thienyl)- (9CI) (CA INDEX NAME)

RN 9003-11-6 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 75-56-9

CMF C3 H6 O

0

СНЗ

CM 2

CRN 75-21-8 CMF C2 H4 O

0

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L56 ANSWER 3 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN
     1992:135528 HCAPLUS
AN
     116:135528
DN
     Performance-oriented packaging standards; changes to classification,
TΙ
     hazard communication, packaging and handling requirements based on UN
     standards and agency initiative
     United States Dept. of Transportation, Washington, DC, 20590-0001, USA
CS
     Federal Register (1990), 55(246), 52402-729, 21 Dec 1990
SO
     CODEN: FEREAC; ISSN: 0097-6326
DT
     Journal
LA
     English
     59-6 (Air Pollution and Industrial Hygiene)
CC
     The hazardous materials regulations under the Federal Hazardous Materials
AB
     Transportation Act are revised based on the United Nations recommendations
     on the transport of dangerous goods. The regulations cover the
     classification of materials, packaging requirements, and package marking,
     labeling, and shipping documentation, as well as transportation modes and
     handling, and incident reporting. Performance-oriented stds. are adopted
     for packaging for bulk and nonbulk transportation, and SI units of
     measurement generally replace US customary units. Hazardous material
     descriptions and proper shipping names are tabulated together with hazard
     class, identification nos., packing group, label required, special
     provisions, packaging authorizations, quantity limitations, and vessel
     stowage requirements.
     hazardous chem transport packaging
ST
     Infection
IΤ
        (agents, packaging and transport of, stds. for)
IT
     Resin acids and Rosin acids
     RL: USES (Uses)
        (aluminum salts, packaging and transport of, stds. for)
     Alkaline earth metals
IΤ
     RL: USES (Uses)
        (amalgams, packaging and transport of, stds. for)
IΤ
     Alkali metals, miscellaneous
     RL: MSC (Miscellaneous)
        (amalgams, packaging and transport of, stds. for)
ΙT
     Dyes
        (coal tar, packaging and transport of, stds. for)
ΙT
     Packaging materials
        (for hazardous material transport, stds. for)
ΙT
     Standards, legal and permissive
        (for hazardous material transportation)
ΙT
     Bromates
     Chlorites
     RL: USES (Uses)
        (inorg., packaging and transport of, stds. for)
ΙT
     Appliances
```

(life-saving, packaging and transport of, stds. for)

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IT
     Borates
     RL: USES (Uses)
        (mixts. contg. chlorates, packaging and transport of, stds. for)
     Chlorates
IΤ
     RL: USES (Uses)
        (mixts. contg., packaging and transport of, stds. for)
ΙT
     Diazonium compounds
     RL: USES (Uses)
        (nitrates, packaging and transport of, stds. for)
ΙT
        (oiled, packaging and transport of, stds. for)
ΙT
     Adhesives
     Alcoholic beverages
     Ammunition
     Antifreeze substances
     Bactericides, Disinfectants, and Antiseptics
     Batteries, primary
     Blasting gelatin
     Bombs (explosives)
     Carbon paper
     Cartridges
     Castor bean
     Coating materials
     Corrosive substances
     Cotton
     Creosote
     Detonators
     Dyes
     Dynamite
     Electric fuses
     Exothermic materials
     Explosives
     Flavoring materials
     Flue dust
     Fuel cells
     Fuel oil
     Fuels, diesel
     Fuels, jet aircraft
     Fusel oil
     Fuses, explosives
     Gas oils
     Hay
     Herbicides
     Igniters and Lighters
     Insecticides
     Lacrimators
     Magnetic substances
     Matches
     Oxidizing agents
     Perfumes
     Pesticides
     Petroleum products
     Pharmaceuticals
     Photoelectric devices
     Poisons
     Primers, explosive
     Projectiles
```

Pyrophoric substances

Pyrotechnic compositions Radioactive substances Refrigerating apparatus Rockets Shale oils Solvent naphtha Sprays Straw Textiles Thermoelectric devices Torpedoes (weapons) Turpentine Wood preservatives (packaging and transport of, stds. for) ΙT Alcohols, miscellaneous Aldehydes, miscellaneous Alkali metal alloys, base Alkali metals, miscellaneous Alkaline earth alloys, base Alkaline earth metals Alkaloids, miscellaneous Amines, miscellaneous Arsenates Arsenites Asbestos Asphalt Bases, miscellaneous Charcoal Coal Coke Cyanates Cyanides, miscellaneous Fibers Fluorides, miscellaneous Gasoline Helium-group gases, miscellaneous Hydrides Hypochlorites Kerosine Ketones, uses Ligroine Metals, miscellaneous Naphtha Natural gas Natural gas condensates Nitrates, miscellaneous Nitrites Perchlorates Permanganates Peroxides, uses Petroleum Petroleum gases, liquefied Polyamines Polyesters, miscellaneous Rosin oil Selenates Selenites Sulfonic acids, miscellaneous

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Terpenes and Terpenoids, miscellaneous
     Thiols, uses
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (packaging and transport of, stds. for)
ΙT
     Refrigeration
        (agents, packaging and transport of, stds. for)
     Sulfonic acids, miscellaneous
ΙΤ
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (alkane, packaging and transport of, stds. for)
     Phenols, miscellaneous
ΙT
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (alkyl, packaging and transport of, stds. for)
     Alkali metals, compounds
ΤТ
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (amides, packaging and transport of, stds. for)
TT
     Fertilizers
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (ammonium nitrate, packaging and transport of, stds. for)
     Gasoline additives
ΤT
        (antiknock, packaging and transport of, stds. for)
     Sulfonic acids, miscellaneous
IT
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (arene, packaging and transport of, stds. for)
     Nitro compounds
ΤT
     RL: USES (Uses)
        (aryl, potassium salts, packaging and transport of, stds. for)
     Nitro compounds
ΙT
     RL: USES (Uses)
        (aryl, sodium salts, packaging and transport of, stds. for)
ΙT
     Fuels
        (aviation, packaging and transport of, stds. for)
ΙT
     Propellants
        (black powder, packaging and transport of, stds. for)
ΙT
     Hydraulic fluids
        (brake, packaging and transport of, stds. for)
ΙΤ
     Flours and Meals
        (cakes, packaging and transport of, stds. for)
TΤ
     Resin acids and Rosin acids
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (calcium salts, packaging and transport of, stds. for)
ΙΤ
     Essential oils
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (camphor, packaging and transport of, stds. for)
ΙT
     Silanes
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (chloro, packaging and transport of, stds. for)
ΙT
     Solvents
        (cleaning, packaging and transport of, stds. for)
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ΙT
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (coal, packaging and transport of, stds. for)
ΙT
     Fuel gases
        (coal gas, packaging and transport of, stds. for)
     Naphthenic acids, compounds
ΙT
     Resin acids and Rosin acids
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (cobalt salts, packaging and transport of, stds. for)
IT
     Coconut
        (copra, packaging and transport of, stds. for)
IT
     Petroleum products
        (distillates, packaging and transport of, stds. for)
ΙT
     Rockets
        (engines, packaging and transport of, stds. for)
     Fire
TT
        (extinguishers, packaging and transport of, stds. for)
     Pyrotechnic compositions
ΤТ
        (fireworks, packaging and transport of, stds. for)
IΤ
     Pyrotechnic compositions
        (flare, packaging and transport of, stds. for)
TT
     Silicates, miscellaneous
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (fluoro-, packaging and transport of, stds. for)
     Gasoline
IΤ
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (gasohol, packaging and transport of, stds. for)
IT
     Ammunition
        (grenades, packaging and transport of, stds. for)
ΤТ
     Asbestos
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (grunerite, packaging and transport of, stds. for)
     Sulfites
ΤT
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (hydrogen, packaging and transport of, stds. for)
ΙT
     Organic compounds, miscellaneous
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (iodyl, packaging and transport of, stds. for)
ΙT
     Group VIII elements
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (iron-group, packaging and transport of, stds. for)
ΙT
     Air
     Corrosive substances
        (liq., packaging and transport of, stds. for)
ΙT
        (liquefied, packaging and transport of, stds. for)
IT
     Resin acids and Rosin acids
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (manganese salts, packaging and transport of, stds. for)
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ΙT
    Castor bean
     Fish
        (meal, packaging and transport of, stds. for)
     Organometallic compounds
IΤ
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (metal alkyls, packaging and transport of, stds. for)
ΙT
     Explosives
        (mines, packaging and transport of, stds. for)
     Carbohydrates and Sugars, miscellaneous
ΙT
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (nitro, packaging and transport of, stds. for)
ΙT
     Aromatic compounds
     RL: USES (Uses)
        (nitro, potassium salts, packaging and transport of, stds. for)
IT
     Aromatic compounds
     RL: USES (Uses)
        (nitro, sodium salts, packaging and transport of, stds. for)
     Fertilizers
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (nitrogen, packaging and transport of, stds. for)
     Peroxides, miscellaneous
TΤ
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (org., packaging and transport of, stds. for)
     Coating materials
IT
        (paints, packaging and transport of, stds. for)
     Essential oils
TΤ
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (pine, packaging and transport of, stds. for)
IΤ
     Inks
        (printing, packaging and transport of, stds. for)
ΙT
     Matches
        (safety, packaging and transport of, stds. for)
IT
     Alkaloids, compounds
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (salts, packaging and transport of, stds. for)
ΙT
     Containers
        (shipping, for hazardous material transport, stds. for)
ΙT
     Pyrotechnic compositions
        (signal rockets, packaging and transport of, stds. for)
ΙT
     Pyrotechnic compositions
        (smoke-generating, packaging and transport of, stds. for)
ΙΤ
     Propellants
        (smokeless, packaging and transport of, stds. for)
IT
     Pharmaceutical dosage forms
        (tinctures, packaging and transport of, stds. for)
IT
     Ammunition
     Pyrotechnic compositions
        (tracers, packaging and transport of, stds. for)
ΙT
     Resin acids and Rosin acids
     RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
     or chemical process); BIOL (Biological study); PROC (Process)
        (zinc salts, packaging and transport of, stds. for)
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IΤ

64-17-5

RL: OCCU (Occurrence) (alcoholic beverages, packaging and transport of, stds. for) 50-00-0, Formaldehyde, miscellaneous 54-11-5, Nicotine 54-11-5D, ΙT Nicotine, compds. 55-63-0, Nitroglycerin 55-68-5, Phenylmercuric nitrate 56-18-8, 3,3'-Iminodipropylamine 56-23-5, miscellaneous 56-38-2, Parathion 57-06-7, Allyl isothiocyanate 57-14-7 57-24-9D, Strychnine, salts 60-00-4, EDTA, miscellaneous 60-24-2 60-29-7, Diethyl ether, miscellaneous 60-34-4, Methylhydrazine 60-57-1, Dieldrin 62-38-4, Phenylmercuric acetate 62-53-3, Aniline, miscellaneous 62-74-8, Sodium fluoroacetate 64-17-5, Ethanol, 64-18-6, Formic acid, miscellaneous 64-18-6D, Formic miscellaneous acid, chloro derivs. 64-19-7, Acetic acid, miscellaneous 64-67-5, Diethyl sulfate 66-25-1, Hexaldehyde 67-56-1, Methanol, miscellaneous 67-63-0, Isopropanol, miscellaneous 67-64-1, Acetone, miscellaneous 67-66-3, Chloroform, miscellaneous 68-11-1, Thioglycolic acid, 68-12-2, N,N-Dimethylformamide, miscellaneous miscellaneous Phenacyl bromide 70-30-4, Hexachlorophene 71-23-8, n-Propanol, 71-41-0, 1-Pentanol, miscellaneous 71-43-2, Benzene, miscellaneous 71-55-6, 1,1,1-Trichloroethane 74-82-8, Methane, miscellaneous miscellaneous 74-83-9, miscellaneous 74-84-0, Ethane, miscellaneous 74-85-1, Ethylene, miscellaneous 74-86-2, Acetylene, miscellaneous 74-87-3, Methyl chloride, miscellaneous 74-88-4, Methyl iodide, miscellaneous 74-89-5, Methylamine, miscellaneous 74-90-8, Hydrogen cyanide, miscellaneous 74-93-1, Methyl mercaptan, miscellaneous 74-95-3, Dibromomethane 74-96-4, Ethyl bromide 74-97-5, 74-98-6, Propane, miscellaneous 75-00-3, Ethyl Bromochloromethane 75-01-4, miscellaneous 75-02-5, Vinyl fluoride chloride Ethylamine, miscellaneous 75-05-8, Methyl cyanide, miscellaneous 75-07-0, Acetaldehyde, miscellaneous 75-08-1, Ethyl mercaptan 75-09-2, Dichloromethane, miscellaneous 75-15-0, Carbon disulfide, miscellaneous 75-16-1, Methyl magnesium bromide 75-18-3, Dimethyl sulfide 75-19-4, Cyclopropane 75-20-7, Calcium carbide 75-21-8 75-21-8, Ethylene oxide, miscellaneous 75-25-2, Bromoform 75-26-3, 2-Bromopropane 75-28-5, Isobutane 75-28-5D, Isobutane, mixts. 75-29-6, 2-Chloropropane 75-31-0, Isopropylamine, miscellaneous 75-33-2, Isopropyl mercaptan 75-34-3, 1,1-Dichloroethane 75-35-4, miscellaneous 75-36-5, Acetyl chloride 75-38-7, 1,1-Difluoroethylene 75-39-8, Acetaldehyde ammonia 75-43-4, Dichloromonofluoromethane 75-44-5, Phosgene 75-45-6, Chlorodifluoromethane 75-46-7, Trifluoromethane 75-50-3, Trimethylamine, miscellaneous 75-52-5, Nitromethane, miscellaneous 75-54-7, Methyldichlorosilane 75-55-8, Propylenimine 75-56-9, Propylene oxide, miscellaneous 75-59-2, Tetramethylammonium hydroxide 75-60-5, Cacodylic acid 75-61-6, Dibromodifluoromethane 75-63-8 75-71-8, Dichlorodifluoromethane 75-72-9, Chlorotrifluoromethane 75-73-0, Tetrafluoromethane Tetramethylsilane 75-77-4, Trimethylchlorosilane, miscellaneous 75-78-5, Dimethyldichlorosilane 75-79-6, Methyltrichlorosilane 75-86-5, Acetone cyanohydrin 75-87-6, Chloral 75-91-2, tert-Butyl hydroperoxide 75-94-5, Vinyltrichlorosilane 76-01-7, Pentachloroethane 76-02-8, Trichloroacetyl chloride 76-03-9, properties 76-05-1, Trifluoroacetic acid, miscellaneous 76-06-2, Chloropicrin 76-06-2D, Chloropicrin, mixts. 76-15-3 76-16-4, Hexafluoroethane 76-19-7, Octafluoropropane 76-22-2, Camphor 77-47-4, Hexachlorocyclopentadiene 77-73-6 77-78-1, Dimethyl sulfate 78-00-2, Tetraethyl lead 78-10-4, Tetraethyl silicate 78-62-6, Dimethyldiethoxysilane 78-67-1, Azodiisobutyronitrile 78-76-2, 2-Bromobutane 78-78-4, Isopentane

78-79-5, Isoprene, miscellaneous 78-81-9, Isobutylamine 78-82-0,

78-83-1, Isobutanol, miscellaneous Isobutyronitrile 78-85-3, Methacrylaldehyde 78-87-5, Propylene Isobutyraldehyde dichloride 78-89-7, Propylene chlorohydrin 78-90-0, 1,2-Propylenediamine 78-93-3, 2-Butanone, miscellaneous Methyl vinyl ketone, miscellaneous 78-95-5, Monochloroacetone 79-01-6, Trichloroethylene, miscellaneous 79-03-8, Propionyl chloride 79-08-3, Chloroacetyl chloride 79-06-1, Acrylamide, miscellaneous Bromoacetic acid 79-09-4, Propionic acid, miscellaneous 79-10-7, 2-Propenoic acid, miscellaneous 79-11-8, Chloroacetic acid, miscellaneous 79-20-9, Methyl acetate 79-21-0, Peroxyacetic acid 79-24-3, Nitroethane 79-29-8, 2,3-Dimethylbutane 79-30-1, Isobutyryl chloride 79-31-2, Isobutyric acid 79-36-7, Dichloroacetyl 79-38-9 79-41-4, miscellaneous 79-42-5 79-43-6, chloride Dichloroacetic acid, miscellaneous 79-44-7, Dimethylcarbamoyl chloride 80-10-4, Diphenyldichlorosilane 80-15-9, Cumene hydroperoxide 80-17-1, Benzene sulfohydrazide 80-47-7, p-Menthane hydroperoxide Diphenyloxide-4,4'-disulfohydrazide 80-56-8, .alpha.-Pinene 80-62-6 82-71-3 85-44-9, 1,3-Isobenzofurandione 86-50-0, Azinphos 81-15-2 87-68-3, Hexachlorobutadiene 87-90-1 88-17-5, methyl 2-Trifluoromethylaniline 88-72-2, o-Nitrotoluene 88-73-3, o-Chloronitrobenzene 88-74-4, o-Nitroaniline 88-75-5, o-Nitrophenol 88-89-1 89-58-7, p-Nitroxylene 91-17-8, Decahydronaphthalene 91-20-3, Naphthalene, miscellaneous 91-20-3D, Naphthalene, diozonide 91-59-8, 91-22-5, Quinoline, miscellaneous 92-52-4D, Biphenyl, .beta.-Naphthylamine 91-66-7, N,N-Diethylaniline chloro derivs. 92-52-4D, Biphenyl, halo derivs. 92-59-1, N-Ethyl-N-benzylaniline 92-87-5, Benzidine 93-58-3, Methyl benzoate 94-17-7, p-Chlorobenzoyl peroxide 94-36-0, Benzoyl peroxide, miscellaneous 95-48-7, miscellaneous 95-50-1, o-Dichlorobenzene 95-54-5, o-Phenylenediamine, miscellaneous 95-55-6, o-Aminophenol 95-85-2, 2-Amino-4-chlorophenol 96-12-8, Dibromochloropropane 95-80-7 96-22-0, Diethyl ketone 96-23-1 96-24-2, Glycerol .alpha.monochlorohydrin 96-32-2, Methyl bromoacetate 96-33-3 96-34-4. Methyl chloroacetate 96-37-7, Methyl cyclopentane 96-41-3, Cyclopentanol 97-62-1, Ethyl isobutyrate 97-63-2 97-64-3, Ethyl lactate 97-72-3, Isobutyric anhydride 97-85-8, Isobutyl isobutyrate 97-88-1 97-95-0 97-96-1, 2-Ethylbutyraldehyde 98-00-0, 97-86-9 Furfuryl alcohol 98-01-1, Furfural, miscellaneous 98-07-7, Benzotrichloride 98-08-8, Benzotrifluoride 98-09-9, Benzene sulfonyl chloride 98-12-4, Cyclohexyltrichlorosilane 98-13-5, Phenyltrichlorosilane 98-16-8, 3-Trifluoromethylaniline 98-82-8, Isopropylbenzene 98-83-9, miscellaneous 98-85-1, .alpha.-Methylbenzyl 98-87-3, Benzylidene chloride 98-88-4, Benzoyl chloride 98-95-3, Nitrobenzene, miscellaneous 99-08-1, m-Nitrotoluene 99-09-2, m-Nitroaniline 99-35-4, Trinitrobenzene 99-99-0, p-Nitrotoluene 100-00-5 100-01-6, p-Nitroaniline, miscellaneous 100-02-7, p-Nitrophenol, miscellaneous 100-17-4 100-34-5, Benzene diazonium chloride 100-36-7, N,N-Diethylethylenediamine RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process) (packaging and transport of, stds. for) 100-37-8, Diethylaminoethanol 100-39-0, Benzyl bromide 100-41-4, Ethylbenzene, miscellaneous 100-42-5, miscellaneous 100-44-7, Benzyl chloride, miscellaneous 100-47-0, Benzonitrile, miscellaneous 100-50-5, 1,2,3,6-Tetrahydrobenzaldehyde 100-57-2, Phenylmercuric hydroxide 100-61-8, N-Methylaniline, miscellaneous 100-63-0, 100-66-3, Anisole, miscellaneous 100-73-2, Acrolein Phenylhydrazine dimer 101-25-7, N,N'-Dinitrosopentamethylenetetramine 101-68-8

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101-77-9, 4,4'-Diaminodiphenyl methane 101-83-7, Dicyclohexylamine 102-69-2, Tripropylamine 102-70-5, Triallylamine 102-81-8, Dibutylaminoethanol 102-82-9, Tributylamine 103-65-1, n-Propylbenzene 103-69-5, N-Ethylaniline 103-71-9, Phenylisocyanate, miscellaneous 103-80-0, Phenylacetyl chloride 103-83-3, Benzyldimethylamine 104-15-4, Toluene sulfonic acid, miscellaneous 104-51-8, Butylbenzene 104-75-6, 2-Ethylhexylamine 104-78-9 104-90-5, 2-Methyl-5ethylpyridine 105-36-2 105-37-3, Ethyl propionate 105-39-5, Ethyl chloroacetate 105-48-6, Isopropyl chloroacetate 105-54-4, Ethyl 105-56-6, Ethyl cyanoacetate 105-57-7, Acetal 105-58-8, Diethyl carbonate 105-64-6, Isopropyl peroxydicarbonate 105-74-8, 106-44-5, p-Cresol, 106-31-0, Butyric anhydride Lauroyl peroxide 106-46-7, p-Dichlorobenzene 106-50-3, miscellaneous p-Phenylenediamine, miscellaneous 106-51-4, 2,5-Cyclohexadiene-1,4dione, miscellaneous 106-63-8, Isobutyl acrylate 106-68-3, Ethyl amyl ketone 106-88-7, 1,2-Butylene oxide 106-89-8, miscellaneous 106-92-3, Allyl glycidyl ether 106-93-4, Ethylene dibromide 106-95-6, Allyl bromide, miscellaneous 106-96-7, 3-Bromopropyne 106-97-8, Butane, miscellaneous 106-97-8D, Butane, mixts. 106-99-0, 1,3-Butadiene, miscellaneous 107-00-6, Ethylacetylene 107-02-8, 2-Propenal, miscellaneous 107-05-1, Allyl chloride 107-06-2, Ethylene dichloride, miscellaneous 107-07-3, Ethylene chlorohydrin, miscellaneous 107-10-8, Propylamine, miscellaneous 107-11-9, Allylamine 107-12-0, Propionitrile 107-13-1, Acrylonitrile, miscellaneous 107-14-2, Chloroacetonitrile 107-15-3, Ethylenediamine, miscellaneous 107-18-6, Allyl alcohol, miscellaneous 107-19-7, Propargyl alcohol 107-20-0, Chloroacetaldehyde 107-25-5, Vinylmethyl ether 107-29-9, Acetaldehyde 107-30-2, Methylchloromethyl ether 107-31-3, Methyl formate 107-37-9, Allyltrichlorosilane 107-49-3, Tetraethyl pyrophosphate 107-70-0 107-71-1, tert-Butyl peroxylacetate 107-72-2, 107-82-4, Amyltrichlorosilane 107-81-3, 2-Bromopentane 1-Bromo-3-methylbutane 107-87-9, Methyl propyl ketone 107-89-1, Aldol 107-92-6, Butyric acid, miscellaneous 108-01-0, Dimethylethanolamine 108-05-4, Acetic acid ethenyl ester, miscellaneous 108-09-8, 1,3-Dimethylbutylamine 108-10-1, Methyl isobutyl ketone 108-11-2, Methyl isobutyl carbinol 108-18-9, Diisopropylamine 108-20-3, Diisopropyl ether 108-21-4, Isopropyl acetate 108-22-5, Isopropenyl acetate 108-23-6, Isopropyl chloroformate 108-24-7, Acetic anhydride 108-31-6, 2,5-Furandione, miscellaneous 108-39-4, miscellaneous 108-45-2, m-Phenylenediamine, miscellaneous 108-46-3, Resorcinol, miscellaneous 108-67-8, miscellaneous 108-77-0 108-83-8, Diisobutyl ketone 108-84-9 108-86-1, Benzene, bromo-, miscellaneous 108-87-2, Methyl cyclohexane 108-88-3, Toluene, miscellaneous 108-90-7, Chlorobenzene, miscellaneous 108-91-8, Cyclohexylamine, miscellaneous 108-94-1, Cyclohexanone, miscellaneous 108-95-2, Phenol, miscellaneous 108-98-5, Phenyl mercaptan, miscellaneous 109-02-4 109-09-1, 2-Chloropyridine 109-13-7, tert-Butyl peroxyisobutyrate 109-52-4, Valeric acid, miscellaneous 109-53-5, Vinyl isobutyl ether 109-60-4, n-Propyl acetate 109-61-5, n-Propyl chloroformate 109-63-7, Boron trifluoride diethyl etherate 109-65-9, n-Butyl bromide 109-66-0, Pentane, miscellaneous 109-70-6, 1-Chloro-3-bromopropane 109-73-9, n-Butylamine, miscellaneous 109-74-0, Butyronitrile 109-77-3, Malononitrile 109-79-5, Butyl mercaptan 109-86-4, Ethylene glycol monomethyl ether 109-87-5, Methylal 109-89-7, Diethylamine, miscellaneous 109-90-0, Ethyl isocyanate 109-92-2, Vinyl ethyl ether 109-93-3, Divinyl ether 109-94-4, Ethyl formate 109-95-5, Ethyl 109-99-9, Tetrahydrofuran, miscellaneous 110-00-9, Furan 110-01-0, Tetrahydrothiophene 110-02-1, Thiophene 110-12-3,

5-Methylhexan-2-one 110-16-7, Maleic acid, miscellaneous 110-19-0 110-22-5, Diacetyl peroxide 110-43-0, Amyl methyl ketone 110-54-3, Hexane, miscellaneous 110-58-7, Amylamine 110-49-6 110-62-3, Valeraldehyde 110-66-7, Amyl mercaptan 110-68-9, N-Methylbutylamine 110-69-0, Butyraldoxime 110-71-4, 1,2-Dimethoxyethane 110-74-7, Propyl formate 110-78-1, n-Propyl isocyanate 110-80-5, Ethylene glycol monoethyl ether 110-82-7, Cyclohexane, miscellaneous 110-83-8, Cyclohexene, miscellaneous 110-85-0, Piperazine, miscellaneous 110-86-1, Pyridine, miscellaneous 110-89-4, Piperidine, miscellaneous 110-91-8, Morpholine, 110-96-3, Diisobutylamine 111-15-9, Ethylene glycol miscellaneous monoethyl ether acetate 111-34-2, Butylvinyl ether 111-36-4, n-Butyl 111-40-0 111-43-3, Dipropyl ether 111-49-9, isocyanate Hexamethylenimine 111-65-9, Octane, miscellaneous 111-69-3, 111-71-7, n-Heptaldehyde 111-76-2, Ethylene glycol Adiponitrile monobutyl ether 111-92-2, Di-n-butylamine 112-04-9 112-57-2 115-07-1, Propylene, miscellaneous Triethylenetetramine 115-11-7, Isobutylene, miscellaneous 115-10-6, Dimethyl ether 115-21-9, Ethyltrichlorosilane 115-25-3, Octafluorocyclobutane 116-14-3, Tetrafluoroethylene, miscellaneous 116-15-4, Hexafluoropropylene 116-16-5, Hexachloroacetone 116-54-1, Methyl dichloroacetate 118-74-1, Hexachlorobenzene 118-96-7, Trinitrotoluene 120-92-3, Cyclopentanone 121-43-7, Trimethyl borate 121-44-8, Triethylamine, miscellaneous 121-45-9, Trimethyl phosphite 121-46-0, 2,5-Norbornadiene 121-69-7, N,N-Dimethylaniline, miscellaneous 121-73-3 121-82-4, Cyclotrimethylenetrinitramine 122-51-0, Ethyl 122-52-1, Triethyl phosphite 123-00-2, orthoformate 4-Morpholinepropanamine 123-15-9 123-19-3, Dipropylketone Vinyl butyrate 123-23-9, Succinic acid peroxide 123-30-8, p-Aminophenol 123-31-9, Hydroquinone, miscellaneous 123-38-6, Propionaldehyde, miscellaneous 123-42-2, Diacetone alcohol 123-54-6, 2,4-Pentanedione, miscellaneous 123-62-6, Propionic anhydride 123-63-7, Paraldehyde 123-72-8, Butyraldehyde 123-75-1, Pyrrolidine, 123-86-4, Butyl acetate 123-91-1, Dioxane, miscellaneous miscellaneous 124-02-7, Diallylamine 124-09-4, Hexamethylenediamine, miscellaneous 124-13-0, Octyl aldehyde 124-18-5, n-Decane 124-38-9, Carbon dioxide, miscellaneous 124-40-3, Dimethylamine, miscellaneous 124-41-4, Sodium 124-43-6 124-65-2, Sodium cacodylate 126-98-7, methylate Methacrylonitrile 126-99-8, Chloroprene 127-18-4, Tetrachloroethylene, 127-85-5, Sodium arsanilate 129-79-3 miscellaneous 131-52-2, Sodium pentachlorophenate 131-73-7, Hexanitrodiphenylamine 131-74-8, Ammonium 133-55-1, N,N'-Dinitroso-N,N'-dimethyl picrate 133-14-2 134-32-7, .alpha.-Naphthylamine 138-86-3, Dipentene terephthalamide 138-89-6 139-02-6, Sodium phenolate RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process) (packaging and transport of, stds. for) 140-29-4, Phenylacetonitrile 140-31-8, 1-Piperazineethanamine 140-80-7 141-32-2 141-43-5, Ethanolamine, miscellaneous 141-57-1, 140-88-5 Propyltrichlorosilane 141-59-3, tert-Octylmercaptan 141-75-3, Butyryl chloride 141-78-6, Ethyl acetate, miscellaneous 141-79-7, Mesityl 142-04-1, Aniline hydrochloride 142-29-0, Cyclopentene 142-62-1, Hexanoic acid, miscellaneous 142-82-5, Heptane, miscellaneous 142-84-7, Dipropylamine 142-96-1, Dibutyl ether 143-33-9, Sodium 144-49-0, Fluoroacetic acid 144-62-7D, Ethanedioic acid, salts 146-84-9, Silver picrate 149-74-6, Methylphenyldichlorosilane 151-56-4, Ethylenimine, miscellaneous 151-50-8, Potassium cyanide 156-62-7, Calcium cyanamide 260-94-6, Acridine 283-66-9, Hexamethylene

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Isopropyl isobutyrate 617-89-0, Furfurylamine 619-97-6, Benzene diazonium nitrate 620-05-3, Benzyl iodide 622-44-6, Phenylcarbylamine chloride 622-45-7, Cyclohexyl acetate 623-42-7, Methyl butyrate 623-87-0, Glycerol-1,3-dinitrate 624-61-3, Dibromoacetylene 624-74-8, Diiodoacetylene 624-83-9, Methyl isocyanate 624-91-9, Methyl nitrite 624-92-0, Dimethyl disulfide 625-76-3, Dinitromethane 626-67-5, 1-Methylpiperidine 627-13-4, n-Propyl nitrate 627-30-5 627-63 627-63-4, 628-32-0, Ethyl propyl Fumaryl chloride 628-28-4, Butyl methyl ether 628-63-7, Amyl acetate 628-81-9, Ethyl butyl ether 628-86-4, Mercury fulminate 628-92-2, Cycloheptene 628-96-6, Ethylene glycol 629-13-0, 1,2-Diazidoethane 629-14-1 629-20-9, dinitrate 630-08-0, Carbon monoxide, miscellaneous 630-72-8, Cyclooctatetraene Trinitroacetonitrile 637-78-5, Isopropyl propionate 638-11-9, Isopropyl butyrate 638-29-9, Valeryl chloride 638-49-3, Amyl formate 641-16-7, 2,3,4,6-Tetranitrophenol 644-31-5, Acetyl benzoyl peroxide 644-97-3, Phenyl phosphorus dichloride 645-55-6, N-Nitroaniline 674-81-7, Nitrosoguanidine 674-82-8, Diketene 646-06-0, Dioxolane 676-83-5, Methyl phosphonous dichloride 676-97-1, Methyl phosphonic 676-98-2, Methyl phosphonothioic dichloride 677-71-4, dichloride 681-84-5, Methyl orthosilicate Hexafluoroacetone hydrate 684-16-2. Hexafluoroacetone 693-21-0, Diethylene glycol dinitrate 694-05-3, 1,2,3,6-Tetrahydropyridine 757-58-4, Hexaethyl tetraphosphate 762-12-9, Decanoyl peroxide 762-13-0, Pelargonyl peroxide 762-16-3 765-34-4, Glycidaldehyde 766-09-6, 1-Ethylpiperidine 771-29-9, Tetralin hydroperoxide 776-74-9, Diphenylmethyl bromide 814-78-8, Methyl isopropenyl ketone 822-06-0 831-52-7, Sodium picramate 883-40-9, Diazodiphenylmethane 918-37-6, Hexanitroethane 918-54-7, 926-63-6 926-64-7, 2-Dimethylaminoacetonitrile Trinitroethanol 928-65-4, Hexyltrichlorosilane 929-06-6, 2-(2-Aminoethoxy)ethanol 993-00-0, Methylchlorosilane 993-12-4 993-43-1, Ethyl phosphonothioic 1002-16-0, Amyl nitrate 1070-19-5, tert-Butoxycarbonyl dichloride 1120-21-4, Undecane 1125-27-5 RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process) (packaging and transport of, stds. for) 1187-93-5, Perfluoromethyl vinyl ether 1299-86-1, Aluminum 1126-78-9 carbide 1300-64-7, Anisoyl chloride 1300-71-6, Xylenol 1300-73-8D, 1303-28-2, Arsenic pentoxide 1303-33-9, Arsenic sulfide 1303-33-9D, Arsenic sulfide, mixt. with chlorates 1304-28-5, Barium oxide, miscellaneous 1304-29-6, Barium peroxide 1305-78-8, Calcium oxide, miscellaneous 1305-79-9, Calcium peroxide 1305-99-3, Calcium phosphide 1309-60-0, Lead dioxide 1310-58-3, Potassium hydroxide, miscellaneous 1310-65-2, Lithium hydroxide 1310-73-2, Sodium hydroxide, miscellaneous 1310-82-3, Rubidium hydroxide 1312-73-8, Potassium sulfide 1313-60-6, Sodium peroxide 1313-82-2, Sodium sulfide, miscellaneous 1314-18-7, Strontium peroxide 1314-22-3, Zinc peroxide 1314-24-5, Phosphorus trioxide 1314-34-7, Vanadium trioxide 1314-56-3, Phosphorus pentoxide, miscellaneous 1314-62-1, Vanadium pentoxide, miscellaneous 1314-80-3, Phosphorus sulfide (P2S5) 1314-84-7, Zinc phosphide 1314-85-8, Phosphorus sesquisulfide 1319-77-3, Cresylic acid 1320-37-2, Dichlorotetrafluoroethane 1321-10-4, Chlorocresol 1321-31-9, Phenetidine 1327-53-3, Arsenic 1330-20-7, Xylene, miscellaneous 1330-45-6, Chlorotrifluoroethane 1330-78-5, Tricresyl phosphate 1331-22-2, Methyl cyclohexanone 1332-12-3, Fulminating gold 1332-37-2, Iron oxide, properties 1333-39-7, Phenolsulfonic acid 1333-41-1, Picoline 1333-74-0, Hydrogen, miscellaneous 1333-82-0, Chromium trioxide 1333-83-1, Sodium hydrogen fluoride 1335-26-8, Magnesium peroxide

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7439-93-2D, Lithium, alkyl derivs. 7439-95-4, Magnesium, miscellaneous 7439-95-4D, Magnesium, alkyl derivs. 7439-97-6, Mercury, miscellaneous 7439-97-6D, Mercury, compds. 7440-01-9, Neon, miscellaneous 7440-09-7, 7440-21-3, Potassium, miscellaneous 7440-17-7, Rubidium, miscellaneous Silicon, miscellaneous 7440-23-5, Sodium, miscellaneous 7440-28-0D, Thallium, compds. 7440-29-1, Thorium, miscellaneous 7440-31-5D, Tin, 7440-32-6, Titanium, properties 7440-36-0, Antimony, org. compds. 7440-36-0D, Antimony, inorg. and org. compds. 7440-37-1, miscellaneous Argon, miscellaneous 7440-38-2, Arsenic, miscellaneous 7440-39-3, 7440-39-3D, Barium, alloys 7440-39-3D, Barium, Barium, miscellaneous 7440-41-7, Beryllium, miscellaneous 7440-41-7D, Beryllium, 7440-43-9D, Cadmium, compds. 7440-44-0, Carbon, miscellaneous 7440-45-1, Cerium, miscellaneous 7440-46-2, Cesium, miscellaneous 7440-55-3, Gallium, miscellaneous 7440-58-6, Hafnium, miscellaneous 7440-59-7, Helium, miscellaneous 7440-61-1, Uranium, miscellaneous 7440-63-3, Xenon, miscellaneous 7440-66-6, Zinc, miscellaneous 7440-67-7, Zirconium, miscellaneous 7440-70-2, Calcium, miscellaneous 7440-70-2D, Calcium, alloys 7446-09-5, Sulfur dioxide, miscellaneous 7446-11-9, Sulfur trioxide, miscellaneous 7446-14-2, Lead sulfate 7446-18-6, Thallium sulfate 7446-70-0, Aluminum chloride (AlCl3), 7487-94-7, Mercuric chloride, miscellaneous 7488-56-4. miscellaneous Selenium disulfide 7521-80-4, Butyltrichlorosilane 7550-45-0, Titanium 7570-26-5, 1,2-Dinitroethane 7572-29-4, tetrachloride, miscellaneous 7580-67-8, Lithium hydride 7601-89-0, Dichloroacetylene 7578-36-1 7601-90-3, Perchloric acid, miscellaneous Sodium perchlorate 7631-89-2, Sodium arsenate 7631-99-4, 7616-94-6, Perchloryl fluoride Sodium nitrate, miscellaneous 7632-00-0, Sodium nitrite 7632-51-1, Vanadium tetrachloride 7637-07-2, Boron trifluoride, miscellaneous 7645-25-2, Lead arsenate 7646-69-7, Sodium hydride 7646-78-8, Stannic 7646-85-7, Zinc chloride, miscellaneous chloride, miscellaneous 7646-93-7, Potassium hydrogen sulfate 7647-01-0, Hydrogen chloride, 7647-18-9, Antimony pentachloride 7647-19-0, Phosphorus miscellaneous pentafluoride RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering or chemical process); BIOL (Biological study); PROC (Process) (packaging and transport of, stds. for) 7664-38-2, Phosphoric acid, miscellaneous 7664-38-2D, Phosphoric acid, 7664-39-3, Hydrogen fluoride, miscellaneous 7664-41-7, Ammonia, miscellaneous 7681-38-1,

7664-93-9, Sulfuric acid, miscellaneous 7681-38-1, sulfate 7681-49-4, Sodium fluoride, miscellaneous Sodium hydrogen sulfate 7681-52-9, Sodium hypochlorite 7697-37-2, Nitric acid, miscellaneous 7704-34-9, Sulfur, miscellaneous 7705-07-9D, Titanium trichloride, 7705-08-0, Ferric chloride, miscellaneous 7718-98-1, Vanadium 7719-09-7, Thionyl chloride 7719-12-2, Phosphorus trichloride trichloride 7722-64-7, Potassium permanganate 7722-84-1, Hydrogen peroxide (H2O2), miscellaneous 7723-14-0, Phosphorus, miscellaneous 7726-95-6, Bromine, miscellaneous 7727-15-3, Aluminum bromide 7727-18-6, Vanadium oxytrichloride 7727-21-1, Potassium persulfate 7727-37-9, Nitrogen, miscellaneous 7727-37-9D, Nitrogen, mixts. with rare gases 7727-54-0, Ammonium persulfate 7738-94-5, Chromic acid (H2CrO4) 7756-94-7, Triisobutylene 7757-79-1, Potassium nitrate, 7758-01-2, Potassium bromate 7758-09-0, Potassium miscellaneous nitrite 7758-19-2, Sodium chlorite 7758-94-3, Ferrous chloride 7761-88-8, Silver nitrate, miscellaneous 7773-03-7, Potassium bisulfite 7775-09-9, Sodium chlorate 7775-14-6, Sodium dithionite 7778-39-4, 7778-44-1, Calcium arsenate 7778-54-3, Calcium Arsenic acid 7778-66-7 7778-74-7, Potassium perchlorate 7779-86-4, hypochlorite Zinc dithionite 7779-88-6, Zinc nitrate 7782-39-0, Deuterium,

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    51023-22-4, Trichlorobutene 51064-12-1 51312-23-3, Mercury bromide
    51317-24-9, Lead nitroresorcinate 51325-42-9, Copper selenite
    51845-86-4, Ethyl borate 52181-51-8 53014-37-2, Tetranitroaniline
    53408-91-6, Mercury thiocyanate 53422-49-4 53569-62-3
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             58499-37-9
    RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
    or chemical process); BIOL (Biological study); PROC (Process)
        (packaging and transport of, stds. for)
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                                          60168-33-4
                                                      60616-74-2, Magnesium
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     63283-80-7, Dichloroisopropyl ether
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                                            68848-64-6
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    Isoheptene
               70042-58-9, tert-Butylcyclohexylchloroformate
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    selenate
                 70281-33-3 70288-87-8
                                         70288-89-0
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                 78369-83-2
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    Cyclobutylchloroformate
                             82280-63-5
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                               105185-95-3
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                                                         109259-85-0
    100920-70-5
    118833-38-8 125227-17-0 127795-79-3, Ammonium arsenate
                                    132052-03-0, Pesticide S
    131566-30-8, Potassium phosphide
    Fulminating platinum 134010-02-9, Fulminating silver 134115-62-1
    134115-63-2, Piperazinedipropanamine
                                         134115-64-3
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                                                          134115-70-1D,
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                                                            134206-88-5,
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                               134282-14-7, Ammonium fulminate
                                                                134282-15-8
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                134265-01-3
    134282-16-9, 5-Azido-1-hydroxytetrazole 134282-17-0 134282-18-1
    134282-19-2 134282-20-5 134282-21-6 134282-23-8,
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    134293-23-5
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                                 135072-82-1
                                              135099-37-5
                                                             135991-25-2,
    Aluminum magnesium phosphide
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    Galactan trinitrate 135991-28-5 135991-41-2
    RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
    or chemical process); BIOL (Biological study); PROC (Process)
        (packaging and transport of, stds. for)
    78-11-5P
ΙT
    RL: SPN (Synthetic preparation); PREP (Preparation)
       (prepn. of)
    110-02-1, Thiophene 125227-17-0
    RL: ADV (Adverse effect, including toxicity); PEP (Physical, engineering
    or chemical process); BIOL (Biological study); PROC (Process)
        (packaging and transport of, stds. for)
RN
    110-02-1 HCAPLUS
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Thiophene (8CI, 9CI) (CA INDEX NAME) CN

S

125227-17-0 HCAPLUS RN

CN Oxirane, methyl-, mixt. with oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 75-56-9

CMF C3 H6 O

Сн3

CM2

CRN 75-21-8 CMF C2 H4 O

0

L56 ANSWER 4 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1990:140522 HCAPLUS

DN 112:140522

ΤI Polyoxyalkylene-substituted chromophore-colored thermoplastic resin compositions

Baumgartner, Alan S.; Moore, Patrick D.; VanDahm, Richard A. ΙN

Milliken Research Corp., USA PΑ

U.S., 12 pp. Cont.-in-part of U.S. 4,732,570. SO CODEN: USXXAM

DTPatent

LΑ English

ΙC ICM D06P003-00

ICS D06P005-13; D06P003-79; D06P003-24

NCL 008506000

CC 37-6 (Plastics Manufacture and Processing)

Section cross-reference(s): 41

FAN.CNT 2

1171.	THE COULT							
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE			
ΡĪ	US 4812141	Α	19890314	US 1988-169568	19880317			
	US 4640690	А	19870203	US 1985-775614	19850913			
	US 4732570	Α	19880322	US 1986-877056	19860623			
PRAI	US 1985-775614		19850913					
	US 1986-877056		19860623					

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The title compns., with good migration resistance, are prepd. by mixing
AΒ
     thermoplastic resins, solvents, and colorants in the form of
     polyalkyleneoxy-substituted chromophores and removing the solvents by
     evapn. 2-Chloro-4-(methylsulfone)aniline 165.4, 70% H2SO4 205.5, water
     535, 2-ethylhexanol 1.6, and 40% nitrosylsulfuric acid 370.5 parts were
     stirred at 0.degree., mixed with 10 parts sulfamic acid to destroy excess
     nitrite, mixed with ethoxylate (d.p. 10) of aniline in water, neutralized
     with 50\% aq. NaOH, and purified to give a colorant with av. mol. wt. 749,
     which (0.58 \text{ g}) was mixed with 1000 g Profax 6301 (with min. amt. of MeOH)
     and injection molded to give a 50-mil plaque having acetone extd. (8 h)
     0.9%, vs. 14.9 for a plaque contg. 0.40 g Solvent Blue 130.
     coloring polypropylene polyoxyalkylene substituted chromophore;
     antimigration polyoxyethylene substituted diazo compd
ΙT
     Polyamides, uses and miscellaneous
     Polycarbonates, uses and miscellaneous
     Polyesters, uses and miscellaneous
     RL: USES (Uses)
        (colorants for, polyoxyalkylene-substituted chromophores as,
        migration-resistant)
ΙT
     Coloring materials
        (polyoxyalkylene-substituted chromophores, prepn. of,
        migration-resistant, for thermoplastic resins)
ΙΤ
        (thermoplastic resin-based, colorants for, polyoxyalkylene-substituted
        chromophores as)
                                                 9002-88-4, Polyethylene
     9002-85-1
                 9002-86-2, Poly(vinyl chloride)
TT
     9003-07-0
                 9003-29-6
                            9003-53-6 9003-56-9, ABS polymer 9004-36-8
                 9010-79-1, Profax SA-841
                                            9011-14-7
                                                        24936-68-3, Merlon M
     9004-39-1
     40HRF-1112, uses and miscellaneous
                                          24968-12-5, Poly(butylene
                      25038-54-4, Capron 8202, uses and miscellaneous
     terephthalate)
     25640-14-6 26062-94-2, Butylene glycol-terephthalic acid copolymer
     107874-03-3, Dowlex 2517
     RL: USES (Uses)
        (colorants for, polyoxyalkylene-substituted chromophores as,
        migration-resistant)
     103779-95-9
                  123902-25-0
IT
     RL: USES (Uses)
        (colorants, for thermoplastic resin-based ink compns.)
     62196-04-7P 86356-62-9P 103779-96-0P 107830-95-5P
                                                               107830-97-7P
     107830-98-8P 107874-22-6P 107874-23-7P
     113755-71-8P
                   123851-90-1P
                                   123902-23-8P
                                                  123924-22-1P
                                                                 123944-63-8P
                   124124-13-6P
                                   124124-14-7P
                                                  124124-17-0P
     124124-12-5P
     RL: PREP (Preparation)
        (colorants, prepn. of, for thermoplastic resin compns.,
        migration-resistant)
IT
     107830-98-8P 107874-22-6P 107874-23-7P
     RL: PREP (Preparation)
        (colorants, prepn. of, for thermoplastic resin compns.,
        migration-resistant)
     107830-98-8 HCAPLUS
RN
     Poly(oxy-1,2-ethanediyl), .alpha.,.alpha.'-[[[4-[(3,5-dicyano-4-methyl-2-
CN
     thienyl)azo]phenyl]imino]di-2,1-ethanediyl]bis[.omega.-hydroxy- (9CI) (CA
     INDEX NAME)
```

NC S
$$N = N = N$$

$$N = CH_2 = CH_2 = CH_2 = CH_2 = CH_2 = OH$$

$$CH_2 = CH_2 = CH_2 = CH_2 = OH$$

RN 107874-22-6 HCAPLUS

CN Oxirane, methyl-, polymer with oxirane, ether with 1,4-bis[(2-hydroxymethylethyl)amino]-9,10-anthracenedione (2:1), dibutyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 177966-41-5 CMF C20 H22 N2 O4 CCI IDS

$$2 (D1-Me)$$

CM 2

CRN 71-36-3 CMF C4 H10 O

H<sub>3</sub>C CH<sub>2</sub>-CH<sub>2</sub> CH<sub>2</sub> OH

CM 3

CRN 9003-11-6

CMF (C3 H6 O . C2 H4 O) $\mathbf{x}$ 

CCI PMS

CM 4

CRN 75-56-9

SHOSHO 10/001347 9/4/03 Page 39

CMF C3 H6 O

CM 5

CRN 75-21-8 CMF C2 H4 O



RN 107874-23-7 HCAPLUS

Oxirane, methyl-, polymer with oxirane, ether with 1,4-bis[(2-hydroxymethylethyl)amino]-9,10-anthracenedione (2:1), dimethyl ether (9CI) (CA INDEX NAME)

CM 1

CRN 177966-41-5 CMF C20 H22 N2 O4 CCI IDS

2 (D1-Me)

CM 2

CRN 67-56-1 CMF C H4 O

нзс он

CM 3

SHOSH0 10/001347 9/4/03 Page 40 CRN 9003-11-6 CMF (C3 H6 O . C2 H4 O) xCCI PMS CM CRN 75-56-9 CMF C3 H6 O CM 5 CRN 75-21-8 CMF C2 H4 O 0 ZÀ L56 ANSWER 5 OF 5 HCAPLUS COPYRIGHT 2003 ACS on STN ΑN 1984:53117 HCAPLUS DN 100:53117 Aqueous dye preparations containing water-insoluble to difficultly soluble ΤI dyes Becker, Carl ΤN PA Ciba-Geigy A.-G. , Switz. SO Patentschrift (Switz.), 20 pp. CODEN: SWXXAS DTPatent LΑ German ΙC C09B067-40; C09K011-06 CC 40-6 (Textiles) Section cross-reference(s): 41 FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_\_ CH 638239 A 19830915 CH 1978-11446 19781107 19781107 PRAI CH 1978-11446 The title compns., esp. useful for prepn. of textile printing pastes or in transfer printing, comprise H2O .gtoreq.10, finely dispersed dye 10-25, anionic dispersing agent 0.1-5, ethylene oxide-olefin oxide copolymer (.gtoreq.65 wt.% ethylene oxide, mol. wt. >12,000) 0.5-5 wt.%, and other optional additives. The compns. are storage stable at 25-60.degree.. Thus, electrolyte-free 1-amino-4-anilino-2-cyanoanthraquinone [32571-82-7] 400, lignosulfonic acid (I) (sulfonated, fractionated kraft lignin) 10, and 80:20 ethylene oxide-propylene oxide copolymer (II) [ **9003-11-6**] (mol. wt. 16,500) 20 parts were dispersed in H2O 398 contg. propylene glycol 170 and preservative 2 parts, milled to <5 .mu. particle size, mixed with 0.1-0.2 wt.% xanthan gum, and stirred to give a

compn. with viscosity 500-1000 cP and pH 9.4. When 30 parts I was used in

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place of the 10:20 I-II mixt. the viscosity of the compn. increased after
     only 3 days at room temp.; at temps. >40.degree. the compn. gelled in 12
     disperse dye aq dispersion stable; water insoluble dye dispersion stable;
ST
     polyethylene polypropylene glycol dispersant; lignosulfonic acid
     dispersant; printing paste dye dispersion; transfer printing ink
     dye dispersion
IT
     Dispersing agents
        (ethylene oxide-propylene oxide copolymers, aq. dye dispersions contg.,
        storage-stable)
ΙΤ
     Thickening agents
        (poly(acrylic acid), textile printing pastes contg., aq. dye
        dispersions for storage-stable)
ΙT
     Dyes, anthraquinone
     Dyes, azo
        (disperse, aq. dispersions of, storage-stable)
ΤT
     Textile printing
        (pastes, aq. dye dispersions for prepn. of, storage-stable)
IT
     Textile printing
        (transfer, inks for, aq. dye dispersions for prepn. of,
        storage-stable)
ΙT
     Dyes
        (vat, aq. dispersions of, storage-stable)
IΤ
     Fluorescent brighteners
        (water-insol., aq. dispersions of, storage-stable)
     57-55-6, uses and miscellaneous
ΙT
     RL: USES (Uses)
        (aq. dye dispersions contq., storage-stable, for textile printing
        pastes)
ΤТ
     8062-15-5D, salt 9003-11-6
     RL: USES (Uses)
        (dispersing agents, aq. dye dispersions contg., storage-stable)
IT
     58213-06-2
     RL: USES (Uses)
        (dispersing agents, ag. fluorescent brightener dispersions contg.,
        storage-stable)
ΙT
     27425-55-4
     RL: USES (Uses)
        (dye, aq. dispersions of, storage-stable)
     81-48-1 1833-72-3 2475-44-7 2872-48-2
ΙT
                                                   2872-52-8 3180-81-2
     4395-65-7
                5124-25-4
                             7576-65-0 12217-80-0
                                                     13418-49-0 17418-58-5
     19660-72-1
                 27425-55-4
                               32571-82-7
                                            58104-49-7
                                                        70210-09-2
                88520-00-7
                              88520-01-8
     70210-10-5
     RL: USES (Uses)
        (dye, ag. dispersions of, storage-stable, for textile printing)
IT
     2866-43-5
     RL: USES (Uses)
        (fluorescent brightener, aq. dispersion of, storage-stable)
IT
     9003-01-4
     RL: USES (Uses)
        (thickening agents, textile printing pastes contq., aq. dye dispersions
        for storage-stable)
ΙT
     128-58-5
     RL: USES (Uses)
        (vat dye, aq. dispersion of, storage-stable)
     116-71-2D, brominated 130-20-1
IT
                                        53460-09-6
     RL: USES (Uses)
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SHOSHO 10/001347 9/4/03 Page 42
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(vat dye, aq. dispersion of, storage-stable, for textile printing
 pastes)
IT 9003-11-6
RL: USES (Uses)
 (dispersing agents, aq. dye dispersions contg., storage-stable)

RN 9003-11-6 HCAPLUS CN Oxirane, methyl-, polymer with oxirane (9CI) (CA INDEX NAME)

CM 1

CRN 75-56-9 CMF C3 H6 O

СН3

CM 2

CRN 75-21-8 CMF C2 H4 O

0

IT 2866-43-5

RL: USES (Uses)

(fluorescent brightener, aq. dispersion of, storage-stable)

RN 2866-43-5 HCAPLUS

CN Benzoxazole, 2,2'-(2,5-thiophenediyl)bis- (7CI, 8CI, 9CI) (CA INDEX NAME)

$$\begin{array}{c|c} & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & \\ & & & \\ & &$$

=> D QUE 1 SEA FILE=REGISTRY ABB=ON 515857-23-5/BI L26 375045 SEA FILE=REGISTRY ABB=ON 16.145/RID L27 18356 SEA FILE=REGISTRY ABB=ON 75-56-9/CRN L28 22522 SEA FILE=REGISTRY ABB=ON 75-21-8/CRN L29 14494 SEA FILE=REGISTRY ABB=ON L28 AND L29 L30 L31 29 SEA FILE=REGISTRY ABB=ON L30 AND L27 "VIOLET X 80LT"/CN 1 SEA FILE=REGISTRY ABB=ON L32 "VIOLET TONER PTMA 55-2925"/CN 1 SEA FILE=REGISTRY ABB=ON L33 L34 2 SEA FILE=REGISTRY ABB=ON VIOLET X?/CN L35 2 SEA FILE=HCAPLUS ABB=ON L26 L36 10 SEA FILE=HCAPLUS ABB=ON L37 3960 SEA FILE=HCAPLUS ABB=ON L32 OR L33 OR L34

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10/001347
                    9/4/03 Page 43
SHOSH0
           198 SEA FILE=HCAPLUS ABB=ON L37 AND (TONER? OR INK#)
L38
            73 SEA FILE=HCAPLUS ABB=ON L38 AND COMPOSITION?
L39
            14 SEA FILE=HCAPLUS ABB=ON L39 AND PIGMENT?
L40
             1 SEA FILE=HCAPLUS ABB=ON L39 AND (HUE(3A)ANGLE? OR BRIGHTNESS
L41
               OR LIGHT (3A) ABSORP?)
             2 SEA FILE=HCAPLUS ABB=ON (L35 OR L36) AND (TONER# OR INK#)
L42
             O SEA FILE=HCAPLUS ABB=ON
                                        (L35 OR L36) AND (HUE(3A)ANGLE? OR
L43
               BRIGHTNESS OR LIGHT (3A) ABSORP?)
             2 SEA FILE=HCAPLUS ABB=ON L42 OR L43
L44
             15 SEA FILE=HCAPLUS ABB=ON L40 OR L41
         347382 SEA FILE=REGISTRY ABB=ON 16.145.3/RID
L46
         347382 SEA FILE=REGISTRY ABB=ON L46 OR L46
L47
        177386 SEA FILE=REGISTRY RAN=(,247262-99-0) ABB=ON L46 OR L46
L49
L50
        169996 SEA FILE=REGISTRY ABB=ON L47 NOT L49
         27634 SEA FILE=HCAPLUS ABB=ON L30
L51
         85504 SEA FILE=HCAPLUS ABB=ON L49
L52
L53
          9074 SEA FILE=HCAPLUS ABB=ON L50
           128 SEA FILE=HCAPLUS ABB=ON L51 AND (L52 OR L53)
L54
             7 SEA FILE=HCAPLUS ABB=ON L54 AND INK#
L55
                                       (L55 OR L44) NOT L44
             5 SEA FILE=HCAPLUS ABB=ON
L56
            15 SEA FILE=HCAPLUS ABB=ON L45 NOT (L56 OR L44)
1.57
=> D L57 BIB ABS HITIND HITSTR
    ANSWER 1 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN
L57
     2003:525539 HCAPLUS
AN
DN
     139:86790
TI
     Aqueous ink-jet ink compositions
     Kataoka, Shuichi; Kubota, Kazuhide; Watanabe, Kazuaki; Takemoto, Kiyohiko
ΙN
     Seiko Epson Corp., Japan
PΑ
     Jpn. Kokai Tokkyo Koho, 15 pp.
SO
     CODEN: JKXXAF
חת
     Patent
     Japanese
LA
FAN.CNT 3
     PATENT NO.
                    KIND DATE
                                          APPLICATION NO. DATE
     _____
                     _____
                                          -----
                                                          _____
                           20030709
     JP 2003192956
                      A2
                                          JP 2001-396126
                                                           20011227
PΙ
     WO 2003055953
                     A1
                         20030710
                                          WO 2002-JP13853 20021227
        W: CN, US
         RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT,
             LU, MC, NL, PT, SE, SI, SK, TR
PRAI JP 2001-396126
                     Α
                           20011227
     JP 2001-398518
                      Α
                           20011227
                           20011227
     JP 2001-398524
                     Α
     Title compns., having good adhesion and gloss without impairing discharge
AΒ
     and storage stability, contain colorants, wetting agents, and resins
     prepd. from ethylenic unsatd. carboxylic acids and other monomers in the
     presence of OH-contg. water-sol. polymers or polymerizable surfactants to
     form polymers with acid value of .ltoreq.40 and a pH adjusted by inorg.
     bases. An aq. ink contg. C.I. pigment red 122
     dispersion, Et acrylate-Me acrylate-methacrylic acid copolymer (prepd. in
     presence of polyvinyl alc.) Na salt, glycerol, ethylene glycol,
     triethanolamine, and 2-pyrrolidone showed viscosity change of <0.3 cPs
     after 1 wk at 70.degree. and gave prints with good adhesion to substrates
     and high gloss.
IC
     ICM C09D011-00
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ICS B41J002-01; B41M005-00
     42-12 (Coatings, Inks, and Related Products)
CC
     storage stability adhesion aq ink methacrylic acid polymer salt;
ST
     gloss adhesion aq colored ink methacrylic acid polymer salt
IΤ
     Glycols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (1,2-, alkane, penetrating agents; unsatd. acid-based polymer salt- and
        wetting agent-contg. aq. colored ink-jet inks with
        high storage stability, adhesion, and gloss)
TΤ
     Ionomers
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (acrylic; unsatd. acid-based polymer salt- and wetting agent-contg. aq.
        colored ink-jet inks with high storage stability,
        adhesion, and gloss)
     Polyethers, uses
ΤТ
     RL: TEM (Technical or engineered material use); USES (Uses)
        (di-Me siloxane-, BYK 348, penetrating agents; unsatd. acid-based
        polymer salt- and wetting agent-contg. aq. colored ink-jet
        inks with high storage stability, adhesion, and gloss)
IΤ
     Polysiloxanes, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (di-Me, polyether-, BYK 348, penetrating agents; unsatd. acid-based
        polymer salt- and wetting agent-contg. aq. colored ink-jet
        inks with high storage stability, adhesion, and gloss)
TT
     Glycols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (ethers, penetrating agents; unsatd. acid-based polymer salt- and
        wetting agent-contg. aq. colored ink-jet inks with
        high storage stability, adhesion, and gloss)
TT
     Ethers, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (glycol, penetrating agents; unsatd. acid-based polymer salt- and
        wetting agent-contg. aq. colored ink-jet inks with
        high storage stability, adhesion, and gloss)
IT
        (jet-printing; unsatd. acid-based polymer salt- and wetting
        agent-contg. aq. colored ink-jet inks with high
        storage stability, adhesion, and gloss)
ΤТ
     Alkali metal hydroxides
     Alkaline earth hydroxides
     RL: TEM (Technical or engineered material use); USES (Uses)
        (neutralizers for unsatd. acid polymers; unsatd. acid-based polymer
        salt- and wetting agent-contg. ag. colored ink-jet
        inks with high storage stability, adhesion, and gloss)
ΤT
    Alcohols, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polyhydric, wetting agents; unsatd. acid-based polymer salt- and
        wetting agent-contg. aq. colored ink-jet inks with
        high storage stability, adhesion, and gloss)
ΙT
     Surfactants
        (polymerizable, manuf. of unsatd. acid-based polymers in presence of;
        unsatd. acid-based polymer salt- and wetting agent-contg. aq. colored
        ink-jet inks with high storage stability, adhesion,
        and gloss)
ΙΤ
    Amines, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
```

(tertiary, wetting agents; unsatd. acid-based polymer salt- and wetting

```
agent-contg. aq. colored ink-jet inks with high
        storage stability, adhesion, and gloss)
ΙT
     Penetrating agents
      Pigments, nonbiological
     Wetting agents
        (unsatd. acid-based polymer salt- and wetting agent-contg. aq. colored
        ink-jet inks with high storage stability, adhesion,
        and gloss)
TT
     Carbon black, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (unsatd. acid-based polymer salt- and wetting agent-contg. aq. colored
        ink-jet inks with high storage stability, adhesion,
        and gloss)
IT
     Carbohydrates, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (wetting agents; unsatd. acid-based polymer salt- and wetting
        agent-contg. aq. colored ink-jet inks with high
        storage stability, adhesion, and gloss)
     9002-89-5, Poly(vinyl alcohol)
ΤТ
     RL: TEM (Technical or engineered material use); USES (Uses)
        (manuf. of unsatd. acid-based polymers in presence of; unsatd.
        acid-based polymer salt- and wetting agent-contg. aq. colored
        ink-jet inks with high storage stability, adhesion,
        and gloss)
IT
     7664-80-4, Octyl thioglycolate
     RL: TEM (Technical or engineered material use); USES (Uses)
        (mol. wt. adjuster; unsatd. acid-based polymer salt- and wetting
        agent-contg. aq. colored ink-jet inks with high
        storage stability, adhesion, and gloss)
TT
     9014-85-1, Surfynol 465
                              195629-22-2, Olfine STG
     RL: TEM (Technical or engineered material use); USES (Uses)
        (penetrating agents; unsatd. acid-based polymer salt- and wetting
        agent-contg. aq. colored ink-jet inks with high
        storage stability, adhesion, and gloss)
     555099-22-4P, Ethyl acrylate-methacrylic acid-methyl acrylate copolymer
ΤТ
     sodium salt
     RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or
     engineered material use); PREP (Preparation); USES (Uses)
        (unsatd. acid-based polymer salt- and wetting agent-contg. aq. colored
        ink-jet inks with high storage stability, adhesion,
        and gloss)
                                   147-14-8, C.I. Pigment
     81-77-6, C.I. Pigment blue 60
ΙT
                980-26-7, C.I. Pigment red 122 1047-16-1, C.I.
     blue 15:3
     Pigment violet 19
                       1103-39-5, C.I. Pigment red 49:2
     1325-82-2, C.I. Pigment violet 3 1328-53-6, C.I.
     Pigment green 7 2379-75-1, C.I. Pigment violet 38
     3049-71-6, C.I. Pigment red 178
                                      3089-17-6, C.I.
     Pigment red 202 3573-01-1, C.I. Pigment red 209
     4051-63-2, C.I. Pigment red 177 4424-06-0, C.I.
     Pigment orange 43 5045-40-9, C.I. Pigment yellow 109
     5462-29-3, C.I. Pigment violet 36 5590-18-1, C.I.
     Pigment yellow 110 6358-31-2, C.I. Pigment yellow 74
     6535-46-2, C.I. Pigment red 112
                                     6655-84-1, C.I.
                     12225-08-0, C.I. Pigment violet 32
     Pigment red 17
     12236-62-3, C.I. Pigment orange 36
                                        14302-13-7, C.I.
     Pigment green 36 30125-47-4, C.I. Pigment yellow 138
     54660-00-3, C.I. Pigment red 255
                                      61847-48-1, C.I.
     Pigment red 188
                     79953-85-8, C.I. Pigment yellow 128
```

88949-33-1, C.I. Pigment red 264 215247-95-3, C.I. Pigment violet 23 RL: TEM (Technical or engineered material use); USES (Uses) (unsatd. acid-based polymer salt- and wetting agent-contg. aq. colored ink-jet inks with high storage stability, adhesion, and gloss) 69-65-8, Mannitol 56-81-5, Glycerol, uses TT 50-70-4, Sorbit, uses 102-71-6, Triethanolamine, uses 107-21-1, Ethylene glycol, uses 111-46-6, Diethylene glycol, uses 616-45-5, 2-Pyrrolidone 8013-17-0, RL: TEM (Technical or engineered material use); USES (Uses) (wetting agents; unsatd. acid-based polymer salt- and wetting agent-contg. aq. colored ink-jet inks with high storage stability, adhesion, and gloss) ΙT 1325-82-2, C.I. Pigment violet 3 RL: TEM (Technical or engineered material use); USES (Uses) (unsatd. acid-based polymer salt- and wetting agent-contg. aq. colored ink-jet inks with high storage stability, adhesion, and gloss) 1325-82-2 HCAPLUS RN C.I. Basic Violet 1, molybdatetungstatephosphate (9CI) (CA INDEX NAME) CN \*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* => D L57 BIB ABS HITIND HITSTR 2-15 ANSWER 2 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN T.57 AN 2002:667396 HCAPLUS DN 137:202790 Water washable lithographic newspaper printing inks containing ΤĪ modified soybean oil based resins Weisbecker, Carl S.; Krech, John H.; Durand, Richard R., Jr.; Webb, ΙN Michelle J.; Warren, Robert M. Sun Chemical Corporation, USA PA SO U.S., 7 pp. CODEN: USXXAM DΤ Patent LA English FAN.CNT 1 KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_\_ \_\_\_\_\_ -----US 6444021 B1 20020903 US 2000-574770 20000519 PΙ PRAI US 2000-574770 20000519 The present invention relates to a water washable lithog. newspaper ink comprising a modified soybean oil based resin, pigment , an acid neutralizing agent, a humectant, and optionally water and a rewetting agent, preferably hydroxyethyl ethylene urea. Thus, a water-based color ink compn. comprising Phthalo Blue Pigment 10.9, varnish comprising alkali refined soybean oil 79.9, maleic anhydride 10, Carbowax 400 10, and Fascat 4100 0.1 parts 47.6, water 17, glycerol 5.0, monoethanolamine 2.4, hydroxyethyl ethylene urea 9.4, Laponite RD clay 1.2, and Fancol VB 6.5 was applied on a printing press giving sharp, well defined, dry images of excellent print quality. ICM C09D011-02 ΙC NCL 106031660 CC 42-12 (Coatings, Inks, and Related Products)

water washable lithog newspaper printing ink; soybean oil

ST

```
ink compn Blue Pigment monoethanolamine
    glycerol
IT
    Carbon black, uses
    RL: TEM (Technical or engineered material use); USES (Uses)
        (Black Pearls 420; water washable lithog. newspaper printing
       ink compns.)
IΤ
        (lithog.; water washable lithog. newspaper printing ink
       compns.)
     Soybean oil
ΙT
     RL: POF (Polymer in formulation); TEM (Technical or engineered material
    use); USES (Uses)
        (modified resins; water washable lithog. newspaper printing ink
       compns.)
ΤТ
    Inks
        (printing; water washable lithog. newspaper printing ink
       compns.)
IΤ
    Humectants
       Pigments, nonbiological
        (water washable lithog. newspaper printing ink compns.)
     Polyoxyalkylenes, uses
IT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (water washable lithog. newspaper printing ink compns.)
ΙT
     105-59-9, n-Methyldiethanolamine
                                       141-43-5, Monoethanolamine, uses
     1310-73-2, Sodium hydroxide, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (acid neutralizing agent; water washable lithog. newspaper printing
        ink compns.)
ΙT
    2273-43-0, Fascat 4100
     RL: CAT (Catalyst use); USES (Uses)
        (catalyst; water washable lithog. newspaper printing ink
        compns.)
                              57-55-6, Propylene glycol, uses
                                                               112-27-6,
ΙT
     56-81-5, Glycerol, uses
    Triethylene glycol 25618-55-7, Polyglycerol
                                                     51555-31-8, Pentaglycerin
                             56491-53-3, Tetraglycerin
                                                           59113-36-9,
     56090-54-1, Triglycerin
     RL: TEM (Technical or engineered material use); USES (Uses)
        (humectant; water washable lithog. newspaper printing ink
        compns.)
ΤТ
     203588-95-8, Fancol VB
     RL: POF (Polymer in formulation); TEM (Technical or engineered material
    use); USES (Uses)
        (water washable lithog, newspaper printing ink compns.)
     108-31-6, Maleic anhydride, uses 147-14-8, C.I. Pigment Blue
IT
           471-34-1, Pigment White 18, uses 574-93-6, C.I.
                     1314-98-3, Pigment White 7, uses
     Pigment Blue 16
     1324-76-1, Pigment Blue 61 1325-82-2, C.I.
     Pigment Violet 3 1325-87-7, Pigment Blue 1
    1328-53-6, Pigment Green 7 1657-16-5, Pigment Yellow
         2092-56-0, Pigment Red 53 2425-85-6, Pigment Red
         2512-29-0, Pigment Yellow 1 2786-76-7, Pigment
             2814-77-9, Pigment Red 4 3520-72-7, Pigment
    Red 170
     Orange 13 3564-21-4, Pigment Red 48 4106-67-6,
                      4531-49-1, Pigment Yellow 17
     Pigment Yellow 5
     5102-83-0, Pigment Yellow 13 5280-68-2, Pigment Red
         5468-75-7, Pigment Yellow 14 5567-15-7, Pigment
     146
                6041-94-7, Pigment Red 2 6358-37-8,
    Yellow 83
    Pigment Yellow 55 6358-85-6, Pigment Yellow 12
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6410-32-8, Pigment Red 12 6410-35-1, Pigment Red 10
     6417-46-5, C.I. Pigment Blue 56 6486-23-3, Pigment
    Yellow 3 6505-28-8, Pigment Orange 16
    Pigment Yellow 65 7023-61-2, Pigment Red 48:2
         -41-3, Pigment Red 48:1 8005-37-6, Pigment White 9004-74-4, Carbowax 350 12213-69-3, Pigment Green 2
     7585-41-3, Pigment Red 48:1
    12224-98-5, Pigment Red 81 12225-06-8, C.I. Pigment
             12225-18-2, Pigment Yellow 97
                                             12656-85-8,
    Pigment Red 104 13463-67-7, Pigment White 6, uses
     13515-40-7, Pigment Yellow 73 14302-13-7, Pigment
               17741-63-8, Pigment Violet 37 17852-98-1,
    Green 36
    Pigment Red 57:2 25322-68-3, Carbowax 400 32432-45-4, C.I.
    Pigment Yellow 98 57455-37-5, Pigment Blue 29
     63467-26-5, Pigment Orange 46 215247-95-3, Pigment
    Violet 23
    RL: TEM (Technical or engineered material use); USES (Uses)
        (water washable lithog. newspaper printing ink compns.)
    1325-82-2, C.I. Pigment Violet 3
ΙT
    RL: TEM (Technical or engineered material use); USES (Uses)
        (water washable lithog. newspaper printing ink compns.)
    1325-82-2 HCAPLUS
RN
    C.I. Basic Violet 1, molybdatetungstatephosphate (9CI) (CA INDEX NAME)
CN
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
             THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
RE.CNT 3
             ALL CITATIONS AVAILABLE IN THE RE FORMAT
L57
    ANSWER 3 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN
AN
    2001:270430 HCAPLUS
DN
    134:296659
    Highly sensitive photoinitiators and photocurable resin
TΙ
    compositions
TN
    Ogata, Tomonari
PΑ
    Showa Denko K. K., Japan
SO
    Jpn. Kokai Tokkyo Koho, 11 pp.
    CODEN: JKXXAF
DT
    Patent
T.A
    Japanese
FAN.CNT 1
                   KIND DATE
    PATENT NO.
                                         APPLICATION NO. DATE
     _______
                                          _____
    JP 2001106712
                    A2 20010417
                                         JP 1999-287622 19991008
PRAI JP 1999-287622
                          19991008
    MARPAT 134:296659
    The compns., useful for photoresists, photocurable inks and
AΒ
    adhesives, etc., contain (A) R1R2R3R4B-.cntdot.X+ (R1-R4 = alkyl, aryl,
    aralkyl, alkenyl, heterocyclic or alicyclic group; .gtoreq.1 of R1-R4 =
     (substituted) naphthyl; X+ = ammonium, (oxo)sulfonium, pyridinium,
    phosphonium, oxonium, or iodonium cation), (B) sensitizers with
    light absorption wavelength .gtoreq.300 nm, (C) triazine
    compds., and (D) polymerizable unsatd. compds. Thus, a compn.
     comprising (a) initiators contg. tetrabutylammonium
    butyltrinaphthylborate, C.I. Basic Yellow 21, and 2,4,6-
    tris(trichloromethyl)-s-triazine, (b) curable compns. contg. isobornyl
    acrylate, iso-Bu acrylate, pentaerythritol triacrylate, and Ripoxy VR 77
     (reactive epoxy resin), and (c) fillers was applied on a glass plate and
    cured by a light irradn. energy of 884 mJ/cm2.
ΙC
    ICM C08F002-50
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ICS C08F002-44; C08F291-00; G03F007-004; G03F007-027; G03F007-029; G03F007-031; G03F007-032; C09D011-10; C09J004-00; C09J004-06

CC 37-6 (Plastics Manufacture and Processing) Section cross-reference(s): 42, 74

ST curable epoxy isobornyl isobutyl erythritol acrylate; photoresist photocurable ink adhesive acrylic polymer; photopolymn catalyst butylammonium butylnaphthylborate trichloromethyl triazine

IT 548-62-9, Crystal violet 989-38-8, C.I. Basic Red 1 6320-14-5, C.I. Basic Red 12 6359-50-8, C.I. Basic Yellow 21
RL: CAT (Catalyst use); PRP (Properties); USES (Uses)
 (sensitizer; highly sensitive photoinitiators for photocurable resin compns.)

IT 548-62-9, Crystal violet

RL: CAT (Catalyst use); PRP (Properties); USES (Uses) (sensitizer; highly sensitive photoinitiators for photocurable resin compns.)

RN 548-62-9 HCAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

• cl -

L57 ANSWER 4 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 2000:91850 HCAPLUS

DN 132:304374

TI Investigation of ball point pen inks by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE)

AU Vogt, Carla; Becker, Andreas; Vogt, Jurgen

CS Institute of Analytical Chemistry, University of Leipzig, Germany

SO Journal of Forensic Sciences (1999), 44(4), 819-831 CODEN: JFSCAS; ISSN: 0022-1198

PB American Society for Testing and Materials

DT Journal

LA English

AB In the process of examg. fraudulent documents ink anal. is a small but important part of the operation of forensic labs. Systematic approaches to ink comparison and identification have been performed by optical methods and various chromatog. techniques. Capillary electrophoresis (CE), a relatively new sepn. technique with very high resoln. power, and Particle Induced X-Ray Emission (PIXE) were used for the anal. of ball point pen inks. In comparison to water sol. fountain pen inks, ball point inks are less sol. or

CC

IΤ

TΤ

IT

ΙT

IT

ΙT

insol. in water and these inks contain only few components. study focused on the optimization of the sepn. of ink exts. from paper material of com. available inks with respect to resoln. and anal. time. During the method development process different buffers, org. modifiers, and surfactants were tested. Good results were obtained with a 50 mM borate buffer pH 9.0 contg. 50% acetonitrile. Reproducible extn. procedures as well as sepns. enables one to perform the quantification of the ink peaks within 1-8% std. deviation for parallel extns. of the same ink. Electropherograms of 20 inks of various origin showed patterns which were in most cases distinctly different from each other. PIXE measurements with an external proton beam were used to det. the metal compn. The ratio of the peak areas for copper and zinc as well as differences in the elemental compn. could be used to distinguished between the samples. No coincidence was obsd. between samples hardly distinguishable by electrophoretic sepns. and by PIXE-measurements. Samples with nearly identical metal compn. showed different peak pattern in the electropherogams, and nearly identical electrophoretic behavior of two or more samples was accompanied by quite different copper/zinc-ratios or supplementary metals identified by PIXE. 4-2 (Toxicology) Section cross-reference(s): 9 ball point pen ink capillary electrophoresis spectrophotometry fluorimetry forensic; particle induced X ray emission ball point ink forensic; PIXE laser induced fluorescence ball point pen ink forensic; UV visible spectrometry ball point pen ink forensic Spectrophotometry (UV/Visible; ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE)) Capillary electrophoresis Dyes Forensic chemistry Laser induced fluorescence PIXE Pigments, nonbiological Solvents На (ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE)) Inks (ball point pen; ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE)) Buffers (borate; ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE)) Trace metals Trace metals RL: ANT (Analyte); ANST (Analytical study) (heavy; ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE)) (ink extd. from; ball point pen inks anal. by

capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE))

ΙT Heavy metals

Heavy metals

RL: ANT (Analyte); ANST (Analytical study)

(trace; ball point pen inks anal. by capillary

electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE))

**548-62-9**, Crystal violet 587-98-4, Acid yellow 36 2580-56-5, TΤ 7439-89-6, Iron, analysis 7439-92-1, Lead, analysis Basic blue 26 7440-02-0, Nickel, analysis 7440-50-8, Copper, analysis 7440-66-6, 8004-87-3, Methyl violet 71567-50-5, Synthetic resin SK Zinc, analysis 92680-42-7, Phtalopal LR 8525 116744-95-7, Astra Blue 6GLL

RL: ANT (Analyte); ANST (Analytical study)

(ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE))

67-56-1, Methanol, uses 67-63-0, 2-Propanol, uses TΥ Acetonitrile, uses 151-21-3, SDS, uses 7732-18-5, Water, uses RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE))

IT

12408-02-5, Hydrogen ion, reactions RL: RCT (Reactant); RACT (Reactant or reagent) (ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE))

ΙT 14213-97-9, Borate

RL: ARG (Analytical reagent use); ANST (Analytical study); USES (Uses) (buffer; ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE))

TΤ **548-62-9**, Crystal violet

> RL: ANT (Analyte); ANST (Analytical study) (ball point pen inks anal. by capillary electrophoresis (CE) with UV/Vis absorbance and laser induced fluorescence detection and Particle Induced X-Ray emission (PIXE))

RN 548-62-9 HCAPLUS

Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5cyclohexadien-l-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

RE.CNT 23

THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT ANSWER 5 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN L57 1998:146534 HCAPLUS AΝ DN 128:210837 Process for preparation of colored toner and developer ΤТ compositions for enlarged color gamut Ciccarelli, Roger N.; Bertrand, Jacques C.; Dalal, Edul N.; Blaszak, Sue IN E.; Natale-Hoffman, Kristen M.; Bayley, Denise R. PΑ Xerox Corp., USA U.S., 14 pp. SO CODEN: USXXAM DT Patent T.A English FAN.CNT 1 PATENT NO. KIND DATE APPLICATION NO. DATE 19980217 US 1996-729225 19961009 PΤ US 5719002 Α US 1997-966153 19971107 US 5866288 19990202 Α PRAI US 1996-729225 19961009 A combination of toners comprises a cyan toner, a magenta toner, a yellow toner, a violet toner , and a black toner, each toner contg. a resin and a pigment. The pigment for each of the colored toners, which excludes black, can be prepd. by flushing a wet pigment cake with a toner resin and removing water to generate a pigmented resin. ΙC ICM G03G009-09 NCL 430137000 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other CC Reprographic Processes) ST color electrophotog toner manuf pigment flushing ITCarbon black, uses RL: TEM (Technical or engineered material use); USES (Uses) (color electrophotog. toners prepd. using) IT Color electrophotographic toners (with enlarged color gamut and manufd. by pigment flushing process) 980-26-7, **Pigment** Red IT 147-14-8, **Pigment** Blue 15:3 989-38-8D, Rhodamine 6G, silicomolybdate salt 1325-82-2, C.I. Pigment Violet 3 4531-49-1, **Pigment** Yellow 17 5281-04-9, Pigment Red 57:1 68310-07-6, Pigment Red 76199-85-4, Pigment Yellow 185 215247-95-3, Pigment Violet 23 RL: TEM (Technical or engineered material use); USES (Uses) (color electrophotog. toners prepd. by flushing wet pigment cakes contg.) 1344-28-1, Aluminum oxide, uses TТ 557-05-1, Zinc stearate 13463-67-7, 60842-32-2, Aerosil R972 Titanium dioxide, uses RL: TEM (Technical or engineered material use); USES (Uses) (color electrophotog. toners prepd. using) 1325-82-2, C.I. Pigment Violet 3 ΙΤ RL: TEM (Technical or engineered material use); USES (Uses) (color electrophotog. toners prepd. by flushing wet pigment cakes contg.) 1325-82-2 HCAPLUS RN CN C.I. Basic Violet 1, molybdatetungstatephosphate (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\* THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 6 ALL CITATIONS AVAILABLE IN THE RE FORMAT L57 ANSWER 6 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN AN 1998:38696 HCAPLUS 128:147502 DN TΙ Energy beam-sensitive activator composition containing onium borate complex acid generator and base generator and curable, positively working, or imaging composition containing it Toba, Taisei; Tanaka, Yasuhiro; Yasuike, Madoka ΙN Toyo Ink Mfg. Co., Ltd., Japan PΑ Jpn. Kokai Tokkyo Koho, 53 pp. SO CODEN: JKXXAF DT Patent LA Japanese FAN.CNT 1 KIND DATE APPLICATION NO. DATE PATENT NO. \_\_\_\_ JP 10007709 JP 1996-162782 19960624 A2 PΤ 19980113 PRAI JP 1996-162782 19960624 OS MARPAT 128:147502 The activator compn. contains an energy beam-sensitive acid AB generator comprising a complex of an onium cation and a borate anion [BYmZn] - (Y = F, Cl; Z = Ph substituted with .gtoreq.2electron-withdrawing groups selected from F, cyano, NO2, and CF3; m = 0-3; n = 1-4; m + n = 4), an energy beam-sensitive base generator, and optionally a sensitizer. The curable compn. contains the above activator compn., an acid-curable compd., and a base-curable compd. The pos.-working compn. comprises the above acid generator compn. and a compd. changing affinity or soly. to a developer by an acid-catalyzed reaction. The imaging compn. comprises the above acid generator compn. and a pigment precursor which colors by reaction with an acid. The activator compn. is applicable for moldings, sealings, resists, inks , coatings, adhesives, dental fillings, printing plates, and holog. recording materials, etc. The acid generator shows improved sensitivity. ICM C08F004-12 TC c08G008-00; c08G012-00; c08G059-72; c08G063-08; c08G065-00; C08G069-20; C08G073-00; C08G075-00; C08G077-08; C08G085-00; G03F007-004; G03F007-029 74-5 (Radiation Chemistry, Photochemistry, and Photographic and Other CCReprographic Processes) Section cross-reference(s): 38, 42 onium borate complex photoacid generator catalyst; photochem catalyst ST onium borate acid generator; pos working curable compn photoacid generator; imaging photochem acid generator onium borate 548-62-9, Crystal Violet ΙT RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (colorant precursor; curable, pos.-working, or imaging compns. contg. onium borate complex energy beam-sensitive activator) 548-62-9, Crystal Violet RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses) (colorant precursor; curable, pos.-working, or imaging compns. contg.

onium borate complex energy beam-sensitive activator)

RN 548-62-9 HCAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

• c1-

L57 ANSWER 7 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1998:25410 HCAPLUS

DN 128:128759

TI Radiation-sensitive acid generator compositions, curable compositions, positively working compositions, and image recording compositions thereof

IN Toba, Yasumasa; Tanaka, Yasuhiro; Yasuike, Madoka; Ichimura, Kunihiro

PA Toyo Ink Mfg. Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 51 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE
PI JP 10001508 A2 19980106 JP 1996-155068 19960617
PRAI JP 1996-155068 19960617

OS MARPAT 128:128759

AΒ The acid generator compns. contain (A) radiation-sensitive acid generators comprising complexes of onium cations and borate anions [BYmZn]- (Y = F, Cl; Z = Ph which is substituted with .gtoreq.2 electron-accepting groups selected from F, CN, NO2, and CF3; m = 0-3; n = 1-4; m + n = 4), (B) agents which breed acids by reacting with the acids from A, and optionally (C) sensitizers. The pos.-working compns. are composed of the acid generator compns. and (D) acid-curable compds or (E) compds. which become more affinitive or sol. to developers by reactions using acidic catalysts. The image recording compns. are composed of the acid generator compds. and (F) pigment precursors which are colored by reacting with the generated acids. Application to moldings, sealings, resists, inks , coatings, adhesives, copying machines, and printers is indicated. an Al plate was coated with a compn. comprising dimethylphenacylsulfonium tetrakis(pentafluorophenyl)borate 3, p-MeC6H4O3SOCH2CMe(OCMe)CO2CMe3 3, and Bakelite ERL 4221 100 parts and exposed to UV to give a tack-free coating.

IC ICM C08F004-12 ICS C08G008-00; C08G012-00; C08G059-72; C08G063-08; C08G065-00; C08G069-20; C08G073-00; C08G075-00; C08G077-08; C08G085-00; G03F007-004; G03F007-029

CC 37-6 (Plastics Manufacture and Processing) Section cross-reference(s): 35, 38, 42, 67, 74

IT 548-62-9, Crystal Violet

RL: MOA (Modifier or additive use); USES (Uses) (colorant precursor; radiation-sensitive catalyst compns. contg. onium-borate complexes and promoters and their pos.-working and image recording compns.)

IT 548-62-9, Crystal Violet

RL: MOA (Modifier or additive use); USES (Uses) (colorant precursor; radiation-sensitive catalyst compns. contg. onium-borate complexes and promoters and their pos.-working and image recording compns.)

RN 548-62-9 HCAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

● cl-

L57 ANSWER 8 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1997:666037 HCAPLUS

DN 127:294772

TI Salicylic acid-based **ink compositions** and method and tools for drawing rough sketches

IN Iijima, Zenshiro

PA Adger Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 6 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

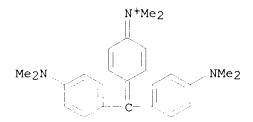
AB Ink compns. for drawing rough sketches comprise salicylic acid and/or acetylsalicylic acid, a pigment other than white, and org. solvents. Thus salicylic acid 30, polyethylene oxide 0.8, and methyl red 0.1 g were dissolved in the mixed solvent of iso-Pr alc. 80 mL and ethylene chloride 20 mL to give an ink compn., which was used to make a pen having a tank contg. the ink. A piece of thin paper was placed on top of an original drawing and the drawing was traced by using the above pen to obtain a rough sketch on the thin paper.

The thin paper then was placed on top of a black cloth and a white cloth resp.; upon ironing, the rough sketch was left on the black cloth in white color and on white cloth in red color.

- IC ICM C09D011-02 ICS D05C001-08
- CC 42-12 (Coatings, Inks, and Related Products)
- ST salicylic acid ink drawing rough sketch; acetylsalicylic acid ink drawing rough sketch
- IT Inks

(salicylic acid-based ink compns. and method and tools for drawing rough sketches)

- IT Polyoxyalkylenes, uses
  - RL: TEM (Technical or engineered material use); USES (Uses) (salicylic acid-based ink compns. and method and tools for drawing rough sketches)
- IT 50-78-2, Acetylsalicylic acid 69-72-7, Salicylic acid, uses 493-52-7, Methyl red **548-62-9**, Crystal violet 25322-68-3, Polyethylene oxide
  - RL: TEM (Technical or engineered material use); USES (Uses) (salicylic acid-based ink compns. and method and tools for drawing rough sketches)
- IT 67-63-0, Isopropyl alcohol, uses 107-06-2, Ethylene chloride, uses RL: TEM (Technical or engineered material use); USES (Uses) (solvent; salicylic acid-based ink compns. and method and tools for drawing rough sketches)
- IT 548-62-9, Crystal violet
  - RL: TEM (Technical or engineered material use); USES (Uses) (salicylic acid-based ink compns. and method and tools for drawing rough sketches)
- RN 548-62-9 HCAPLUS
- CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)



● cl-

- L57 ANSWER 9 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN
- AN 1997:192100 HCAPLUS
- DN 126:187485
- TI Novel colorant modifiers, and stabilization of colorants therewith
- IN Nohr, Ronald Sinclair; MacDonald, John Gavin
- PA Kimberly-Clark Corporation, USA; Nohr, Ronald Sinclair; MacDonald, John Gavin
- SO PCT Int. Appl., 107 pp.

CODEN: PIXXD2

DT Patent LA English FAN.CNT 6 PATENT NO. KIND DATE APPLICATION NO. DATE \_\_\_\_\_ \_\_\_\_ -----\_\_\_\_\_\_ 19970116 A1 WO 1996-US4689 19960405 WO 9701605 PΙ W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN ZA 9510849 Α 19960702 ZA 1995-10849 19951220 CA 2221565 AA19970116 CA 1996-2221565 19960405 AU 9655352 19970130 AU 1996-55352 Α1 EP 1996-912579 EP 846146 A 1 19980610 EP 846146 B1 20010926 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI BR 1996-9295 19960405 19990518 BR 9609295 Α JP 1997-504390 19960405 JP 2000506550 Т2 20000530 AT 1996-912579 AT 206150 Ε 20011015 19960405 ES 1996-912579 ES 2161357 Т3 20011201 19960405 CA 1996-2219459 19960603 CA 2219459 AA19961212 EP 830676 A1 19980325 EP 1996-917008 19960603 EP 830676 20010816 В1 AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI 19990511 BR 1996-8388 BR 9608388 Α 19960603 JP 11507142 T2 19990622 JP 1996-501046 19960603 E 20010915 AT 1996-917008 19960603 AT 204403 ES 2159739 Т3 ES 1996-917008 20011016 19960603 US 6033465 20000307 US 1997-983159 19971229 Α US 6342305 В1 20020129 US 1999-473839 19991228 PRAI US 1995-570P P 19950628 US 1993-119912 B2 19930910 US 1994-183683 B2 19940119 US 1994-258858 B2 19940613 US 1994-359670 B2 19941220 US 1994-360501 19941221 Α US 1995-373958 В2 19950117 US 1995-403240 В2 19950310 US 1995-461372 В2 19950605 US 1995-462103 19950605 А WO 1996-US4689 W 19960405 WO 1996-US8445 W 19960603 US 1997-983159 19971229 А3 MARPAT 126:187485 OS A light-stable colored compn. includes a colorant and a AΒ radiation transorber R1COCH:CHR2 [R1, R2 = H, alkyl, heterocyclyl, (un) substituted aryl; R1 or R2 = substituted aryl], which may be attached to a clathrating agent such as a cyclodextrin. The colorant, in the presence of the radiation transorber, is adapted, upon exposure of the transorber to specific, narrow-bandwidth radiation, to be mutable. The radiation transorber also imparts light stability to the colorant so that the colorant does not fade when exposed to visible light. Thus, PhCOMe was condensed with p-HO2CC6H4CHO and the product was converted to the acid SHOSHO 10/001347 9/4/03 Page 58

chloride and used to esterify hydroxyethyl .alpha.-cyclodextrin. The cyclodextrin ester stabilized Victoria Pure Blue BO against decolorization during irradn. with a Hg lamp.

IC ICM C09B067-00

ICS C07C069-94; C07C069-773; C07C065-38

CC 42-12 (Coatings, Inks, and Related Products) Section cross-reference(s): 37, 44

IT Inks

RL: POF (Polymer in formulation); USES (Uses)

(jet-printing; pigments stabilized against photofading for)

IT Epoxy resins, uses

Polyoxyalkylenes, uses

RL: POF (Polymer in formulation); USES (Uses)

(pigments stabilized against photofading for)

IT 548-62-9P

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (inclusion compds. with cyclodextrin ethers; photostabilization of colorants)

IT 25068-38-6 25322-68-3

RL: POF (Polymer in formulation); USES (Uses)

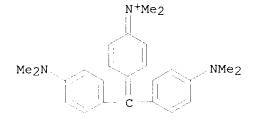
(pigments stabilized against photofading for)

IT 548-62-9P

RL: IMF (Industrial manufacture); PRP (Properties); PREP (Preparation) (inclusion compds. with cyclodextrin ethers; photostabilization of colorants)

RN 548-62-9 HCAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)



● C1 -

L57 ANSWER 10 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1995:503479 HCAPLUS

DN 123:115730

TI Ball-point pen **ink compositions** with good storage stability

IN Nasukawa, Makoto; Takahashi, Hiroshi

PA Pentel Kk, Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

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KIND DATE
                                          APPLICATION NO. DATE
    PATENT NO.
                           _____
     _____ ____
                                          _____
                                                           _-----
                                          JP 1993-208354 19930730
    JP 07041721
                      A2
                           19950210
PRAI JP 1993-208354
                           19930730
AΒ
    The compns. contain coloring agents, solvents, and polyoxyethylene alkyl
    carboxymethyl ethers and/or their salts. Thus, C.I. Solvent Black 7 30.0,
     ethylene glycol monophenyl ether 30.0, benzyl alc. 10.0, polyoxyethylene
     tridecyl carboxymethyl ether Na salt 6.5, gum rosin 20.0, and
     poly(vinylpyrrolidone) 2.0 parts were mixed at 80.degree. for 4 h and
     filtered to give an ink with good storage stability.
IC
    ICM C09D011-18
    42-12 (Coatings, Inks, and Related Products)
CC
ST
    ballpoint pen ink polyoxyethylene ether
TT
    Carbon black, uses
     RL: TEM (Technical or engineered material use); USES (Uses)
        (pigments; ball-point pen inks contg.
       polyoxyethylene alkyl carboxymethyl ethers with good storage stability)
ΙT
    Inks
        (writing, ball-point pen inks contg. polyoxyethylene alkyl
       carboxymethyl ethers with good storage stability)
IT
     31800-53-0
                33939-64-9
                              52004-32-7
                                          53563-70-5 61757-59-3
     79869-64-0
                 100188-12-3
     RL: MOA (Modifier or additive use); USES (Uses)
        (ball-point pen inks contg. polyoxyethylene alkyl
       carboxymethyl ethers with good storage stability)
    147-14-8, Phthalocyanine blue 509-34-2, C.I. Solvent Red 49
IT
     548-62-9, C.I. Basic Violet 3 1328-55-8, C.I. Solvent Blue 55
     1934-21-0, C.I. Acid Yellow 23
                                    5601-29-6, C.I. Solvent Yellow 21
     8005-02-5, C.I. Solvent Black 7
     RL: TEM (Technical or engineered material use); USES (Uses)
        (pigments; ball-point pen inks contg.
       polyoxyethylene alkyl carboxymethyl ethers with good storage stability)
    57-55-6, Propylene glycol, uses 100-51-6, Benzyl alcohol, uses
ΤT
    122-99-6, Ethylene glycol monophenyl ether
    RL: TEM (Technical or engineered material use); USES (Uses)
        (solvents; ball-point pen inks contg. polyoxyethylene alkyl
       carboxymethyl ethers with good storage stability)
    548-62-9, C.I. Basic Violet 3
TΤ
    RL: TEM (Technical or engineered material use); USES (Uses)
        (pigments; ball-point pen inks contg.
       polyoxyethylene alkyl carboxymethyl ethers with good storage stability)
    548-62-9 HCAPLUS
RN
CN
    Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-
    cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)
```

● c1 -

```
L57 ANSWER 11 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN
    1992:162472 HCAPLUS
AN
DN
    116:162472
    Electrophotographic toner composition
ΤТ
    Kawasaki, Shoji; Hirayama, Nobuhiro; Uchiyama, Kenji; Sato, Hisatomo;
ΙN
    Akiyama, Hiromi
    Mitsui Toatsu Chemicals, Inc., Japan
PA
SO
    PCT Int. Appl., 34 pp.
    CODEN: PIXXD2
DT
    Patent
LA
    Japanese
FAN.CNT 1
                 KIND DATE
    PATENT NO.
                                        APPLICATION NO. DATE
                    ----
                                        _____
    WO 9109348
                    A1 19910627
                                        WO 1990-JP1652 19901219
РΤ
        W: JP, KR, US
        RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LU, NL, SE
    EP 460225
                    A1 19911211
                                    EP 1991-900918 19901219
    EP 460225
                    В1
                         19980610
        R: DE, ES, FR, GB, NL, SE
    ES 2118747 T3 19981001
                                        ES 1991-900918 19901219
    US 5230978
                         19930727
                                        US 1991-741537 19910814
PRAI JP 1989-327274
                          19891219
    WO 1990-JP1652
                          19901219
AB
    An electrophotog. toner compn. comprises a polymer
    obtained by portionwise or continuous dropwise addn. of a soln. contg. a
    divinyl compd. 0.01-30, a solvent y, and a polymn. initiator 0.01-10 wt.
    parts to 100 wt. parts of an ethylenic monomer or a soln. of 100 wt. parts
    of an ethylenic monomer in x wt. parts of a solvent, wherein 20 .ltoreq. x
    + y .ltoreq. 200 or 20 .ltoreq. y .ltoreq. 200. This electrophotog.
    toner comprising a resin low in melt viscosity and high in
    strength provides a toner fixable with small heat quantity, has
    excellent strength, and thus is adaptable to a high speed copier requiring
    only a small amt. of heat for toner fixation.
```

74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other

electrophotog toner binder polymer; low melt viscosity polymer

Quaternary ammonium compounds, uses

ΙC

CC

ST

ΙT

ICM G03G009-087

RL: USES (Uses)

Reprographic Processes)

Section cross-reference(s): 35

```
(charge-adjusting agent, electrophotog. toner contg.)
ΙT
     Epoxy resins, uses
     Paraffin waxes and Hydrocarbon waxes, uses
     Phenolic resins, uses
     Polyesters, uses
     Rosin
     RL: TEM (Technical or engineered material use); USES (Uses)
        (electrophotog. toner contg.)
     Carbon black, uses
TΤ
     RL: USES (Uses)
        (pigment, electrophotog. toner contg.)
IT
     Vinyl acetal polymers
     RL: TEM (Technical or engineered material use); USES (Uses)
        (butyrals, electrophotog. toner contg.)
ΙT
     Fatty acids, compounds
     RL: USES (Uses)
        (metal salts, charge-adjusting agent, electrophotog. toner
     Terpenes and Terpenoids, polymers
TT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (polymers, electrophotog. toner contg.)
TT
     Electrophotographic developers
        (toners, contg. polymer binder with low melt viscosity, for
        high speed and small heat quantity copier)
     8005-03-6, Nigrosine
ΙT
     RL: USES (Uses)
        (charge-adjusting agent, electrophotog. toner contg.)
     9002-86-2, Poly(vinyl chloride)
IT
     RL: TEM (Technical or engineered material use); USES (Uses)
        (electrophotog. toner contg.)
                                79-10-7D, 2-Propenoic acid, esters
ΙT
     79-06-1, Acrylamide, uses
    Methacrylamide 79-41-4, uses 79-41-4D, esters 97-90-5 107-13-1, Acrylonitrile, uses 110-17-8D, Fumaric acid, dialkyl esters 110-17-8D,
     Fumaric acid, mono ester 621-82-9, Cinnamic acid, uses 2274-11-5
     25852-47-5
                  26570-48-9
                               77221-84-2
     RL: USES (Uses)
        (monomer, for manuf. of electrophotog. toner polymer binder)
     91-22-5, Quinoline, uses 147-14-8, Phthalocyanine Blue 1309-38-2,
TΤ
     Magnetite, uses
                     1314-13-2, Zinc oxide (ZnO), uses
                                                           1324-02-3
                1344-37-2, Chrome yellow 1345-16-0, Cobalt Blue
     2512-29-0, Hansa Yellow G 5281-04-9, Brilliant Carmine 6B 5979-28-2,
     Permanent Yellow NCG 12656-85-8, Molybdenum Orange 13463-67-7,
     Titanium oxide, uses 16143-80-9, Pigment Green B 61725-50-6,
     Malachite Green Lake 67340-41-4, Fast Sky Blue 72413-00-4, Vulcan
     Orange 103370-46-3, Alkali Blue Lake
     RL: USES (Uses)
        (pigment, electrophotog. toner contg.)
ΙT
     60806-47-5P
     RL: PREP (Preparation)
        (prepn. of, as electrophotog. toner binder)
     1309-37-1, Iron oxide, uses
ΤT
     RL: USES (Uses)
        (red, pigment, electrophotog. toner contg.)
     71-43-2, Benzene, uses 95-47-6, o-Xylene, uses 98-82-8, Cumene
ΤТ
     100-41-4, Ethylbenzene, uses 106-42-3, uses 108-38-3, uses
                                                                       108-88-3,
                     1330-20-7, Xylene, uses
     Toluene, uses
     RL: USES (Uses)
        (solvent, for manuf. of electrophotog. toner polymer binder)
```

IT 1325-82-2

RL: USES (Uses)

(pigment, electrophotog. toner contg.)

RN 1325-82-2 HCAPLUS

CN C.I. Basic Violet 1, molybdatetungstatephosphate (9CI) (CA INDEX NAME)

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

L57 ANSWER 12 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1986:562201 HCAPLUS

DN 105:162201

TI Electrophotographic liquid developer

IN Tsubushi, Kazuo

PA Ricoh Co., Ltd., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp. CODEN: JKXXAF

DT Patent

LA Japanese

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI JP 60221768 A2 19851106 JP 1984-77830 19840418

PRAI JP 1984-77830 19840418

GI

Ι

ΙI

The title developer contg. colorants and a polymer in an insulating, low-dielec. const. medium also contains a compd. having the general formula I (R to R5 = C1-20 alkyl; R6 = OH, CO2H). The addn. of I prevents deterioration of image sharpness and image d. Thus, a compn. contg. I 40, 3:2:1:4 2-ethylhexyl methacrylate-lauryl methacrylatemethacrylic acid-Me methacrylate copolymer 35, C black (Raven 1035) 12, methylene blue 2, and Isopar H 90 g was kneaded and added to 360 g Isopar

H. The dispersion 140 g was dild. with 1 L Isopar H to obtain an electrophotog. liq. developer. The developer gave well-defined images on paper having smoothness ranging from 10 s to 150 s, even though the addn. of I made the toner diam. larger. ICM G03G009-12 TC 74-3 (Radiation Chemistry, Photochemistry, and Photographic and Other CC Reprographic Processes) ΙT Carbon black, uses and miscellaneous RL: USES (Uses) (liq. electrophotog. developer contg. pigment and copolymer and steroid compd. and, in insulating medium)

ΙT Steroids, uses and miscellaneous

RL: USES (Uses)

(liq. electrophotog. developers contg. pigments and polymer and, in insulating media)

Alkanes, uses and miscellaneous ΤТ

RL: USES (Uses)

(C9-12-iso-, liq. electrophotog. developer contg. pigments and copolymer and steroid compd. in)

Photography, electro-, developers IT

(liq., contg. pigments and copolymer and steroid compd. in insulating medium)

61-73-4 147-14-8 **548-62-9** 1328-53-6 68993-80-6 ΙT

RL: USES (Uses)

(liq. electrophotog. developer contg. carbon black and copolymer and steroid compd. and, in insulating medium)

60382-94-7 92881-18-0 92881-19-1 ΙT

RL: USES (Uses)

(liq. electrophotog. developer contg. pigments and copolymer and steroid compd. and, in insulating medium)

104432-62-4 104432-63-5 104432-64-6 104432-65-7 ΙT 104432-61-3 104432-66-8 104446-18-6 104486-87-5

RL: USES (Uses)

(liq. electrophotog. developer contg. pigments and copolymer and, in insulating medium)

56343-94-3 60163-90-8 92538-05-1 93884-33-4 99456-07-2 IT RL: USES (Uses)

> (lig. electrophotog. developer contg. pigments and steroid compd. and, in insulating medium)

ΤТ 548-62-9

RL: USES (Uses)

(liq. electrophotog, developer contq. carbon black and copolymer and steroid compd. and, in insulating medium)

RN 548-62-9 HCAPLUS

Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-CN cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

● c1-

L57 ANSWER 13 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1984:573254 HCAPLUS

DN 101:173254

TI Ink composition for ink jet printing

IN Bhatia, Yog R.

PA Dick, A. B., Co., USA

SO U.S., 5 pp. CODEN: USXXAM

DT Patent LA English

FAN.CNT 1

	LTIA . CIAI	_				
	PA	TENT NO.	KIND	DATE	APPLICATION NO.	DATE
I	PI US	4465800	Α	19840814	US 1983-474173	19830310
	DE	3408706	A1	19840913	DE 1984-3408706	19840309
	DE	3408706	C2	19950105		
	GB	3 2137219	A1	19841003	GB 1984-6244	19840309
	GB	2137219	B2	19860924		
	JP	59202274	<b>A</b> 2	19841116	JP 1984-45361	19840309
	JР	03021582	B4	19910325		
	CA	. 1207999	<b>A</b> 1	19860722	CA 1984-449275	19840309
Į	PRAI US	1983-474173		19830310		

Jet printing inks contain a phenolic resole, a lower alkanol solvent, a pigment or sol. basic dye, HONH2.HCl (resistivity control agent), an evapn. retardant, and a modifying resin, preferably a butryal resin. Thus, 56.4 parts MeOH [67-56-1] and 24.0 parts 55% soln. of Bakelite BLS 2700 [9003-35-4] resole resin in EtOH [64-17-5] were mixed for 15 min, 10.0 parts ethylene glycol Et ether [110-80-5] and 906 parts Bakelite XYHL vinyl butyral resin were added, and the compn. was mixed for 15 min before adding 44 parts HONH2.HCl and 3.20 parts C.I. Basic Violet 3 [548-62-9]. The resulting resin had pH 5.2, sp. resistivity 570 .OMEGA.-cm, sp. gr. 8.8, viscosity 2.2 cP, and sonic velocity 1217 m/s.

IC C09D003-54; C09D003-56; C08L061-10

NCL 524236000

CC 42-12 (Coatings, Inks, and Related Products)

ST phenolic resole printing ink; jet printing ink; alkanol solvent jet printing ink; methanol solvent jet printing ink; ethanol solvent jet printing ink; evapn retardant jet printing ink; glycol ether evapn retardant ink; basic dye jet printing ink

SHOSHO 10/001347 9/4/03 Page 65

IT 110-80-5 111-90-0 RL: USES (Uses)

(evapn. retardants, jet-printing inks contg.)

IT 64-17-5, uses and miscellaneous 67-56-1, uses and miscellaneous 81-88-9 506-59-2 548-62-9 5470-11-1 9003-35-4
RL: TEM (Technical or engineered material use); USES (Uses) (jet-printing inks contg.)

IT 548-62-9
 RL: TEM (Technical or engineered material use); USES (Uses)
 (jet-printing inks contg.)

RN 548-62-9 HCAPLUS

CN Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)

● Cl -

L57 ANSWER 14 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1979:213201 HCAPLUS

DN 90:213201

TI Hybrid liquid pigmentation charges or toners

IN Kosel, George E.

PA Hunt, Philip A., Chemical Corp., USA

SO Fr. Demande, 85 pp. CODEN: FRXXBL

DT Patent

LA French

FAN.CNT 1

r AM.	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	FR 2369599	A1	19780526	FR 1976-32614	19761028
	FR 2369599	В1	19820521		
PRAT	FR 1976-32614		19761028		

AB Microfiche records of high quality are obtained by development of electrostatic images with a hybrid developer compn. comprised of a mixt. of a classical liq. developer (carbon black type, resistivity .apprx.109 .OMEGA.-cm) contg. a thermoplastic fixing agent and dispersant and a 2nd liq. developer contg. an amphipathic graft copolymer. A charge-orienting substance is also present in one of the above developers.

```
ΙC
     G03G009-12
CC
     74-3 (Radiation Chemistry, Photochemistry, and Photographic Processes)
ΙT
     Resin acids and Rosin acids
     RL: USES (Uses)
        (dimers, diisocyanates liq. developer compn. contg., for
        electrostatic image development in microfiche prodn.)
ΙT
     Rosin
     RL: USES (Uses)
        (hydrogenated, liq. developer compn. contg., for
        electrostatic image development in microfiche prodn.)
     Carbon black, uses and miscellaneous
TΤ
     Coumarone-indene resins
     Resin acids and Rosin acids
     RL: USES (Uses)
        (liq. developer compn. contq., for electrostatic image
        development in microfiche prodn.)
ΙT
     Electrography
        (liq. developer mixt. compn. for, for microfiche prodn.)
IT
     Photography, electro-, developers
        (color, liq., hybrid compn. as, for microfiche prodn.)
     Resin acids and Rosin acids
TT
     RL: USES (Uses)
        (esters with glycerol, liq. developer compn. contg., for
        electrostatic image development in microfiche prodn.)
     Photography, electro-, developers
ΙT
        (liq., hybrid compn. as, for microfiche prodn.)
ΤТ
     Castor oil
     RL: USES (Uses)
        (polymd., liq. developer compn. contg., for electrostatic
        image development in microfiche prodn.)
     81-88-9D, reaction product with amphipathic graft copolymer
                                                                    509-34-2
     548-62-9D, reaction product with amphipathic graft copolymer
     632-99-5D, reaction product with amphipathic graft copolymer
                                                                    842-07-9D,
     reaction product with amphipathic graft copolymer
                                                        1332-85-0D, reaction
     product with amphipathic graft copolymer 1333-86-4D, reaction product
     with amphipathic graft copolymer 2465-27-2D, reaction product with
     amphipathic graft copolymer 6786-83-0D, reaction product with
                                   10114-58-6D, reaction product with
     amphipathic graft copolymer
     amphipathic graft copolymer
     RL: USES (Uses)
        (liq. developer compn. contq., for electrostatic image
        development for microfiche prodn.)
ΙT
     136-52-7 147-14-8 301-10-0
                                      637-12-7
                                                 1306-24-7, uses and
     miscellaneous
                     1333-86-4 6904-78-5 9086-93-5
                                                         11099-03-9
     25038-32-8
                  51320-04-8
                             57029-31-9
                                            62649-16-5
                                                         62715-07-5
     69522-03-8
     RL: USES (Uses)
        (liq. developer compn. contq., for electrostatic image
        development in microfiche prodn.)
ΙT
     548-62-9D, reaction product with amphipathic graft copolymer
     RL: USES (Uses)
        (liq. developer compn. contg., for electrostatic image
        development for microfiche prodn.)
     548-62-9 HCAPLUS
RN
CN
    Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-
     cyclohexadien-l-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)
```

● Cl =

L57 ANSWER 15 OF 15 HCAPLUS COPYRIGHT 2003 ACS on STN

AN 1976:569689 HCAPLUS

DN 85:169689

TI Electrophotographic liquid developer composition

IN Yamashita, Hiroshi; Osawa, Sadao

PA Fuji Photo Film Co., Ltd., Japan

SO Ger. Offen., 29 pp. CODEN: GWXXBX

DT Patent

LA German

FAN.CNT 1

LWW.	CMII				
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
ΡI	DE 2537578	A1	19760304	DE 1975-2537578	19750822
	JP 51024233	A2	19760227	JP 1974-96194	19740823
DDAT	TD 1974-96194		19740823		

PRAI JP 1974-96194 19740823 Electrophotog. liq. developers are described which consist of an elec. insulating carrier liq. and neg.-charged  ${\bf toner}$  particles from a vinylcarbozole polymer or copolymer carrying an electron-withdrawing substituent with a Hammet const. of .apprx.0.01 to 0.8. The properties of these developers are not affected by the presence of small amts. of impurities and because of this, the developers are storage stable and can be readily reproduced. Thus, a soln. contg. brominated poly(vinylcarbozole) (1 bromine atom/monomer unit; mol. wt. of .apprx.300,000) 3, rhodamine 0.1, and CH2Cl2 100 g was dispersed in Isopar E 5 l. to give a ppt. This ppt. 2, Superbeckosol J 537 (saffron oil-modified alkyd resin) 20, and Isopar H 25 g were ball-milled for 35 hr to give a paste which was dild. 20 fold with Isopar H to give a liq. developer that when used with a photosensitive ZnO-contg. layer gave a clear and accurate reddish purple image with a max. reflection d. of 1.51 and a fog d. of 0.06. A portion of this developer which had been stored for 30 days at 20-30.degree. gave pos. images with essentially the same image quality.

IC G03G

CC 74-3 (Radiation Chemistry, Photochemistry, and Photographic Processes)

ST polyvinylcarbozole toner electrophotog liq developer

IT Carbon black, uses and miscellaneous

RL: USES (Uses)

(acrylic polymer-modified, electrophotog. liq. developers contg. toners from brominated poly(vinylcarbozole), polymers, and)

IT Photography, electro-

(liq. developers for, toner compns. contg.

```
electron-withdrawing group-substituted poly(vinylcarbozole) polymer
        for)
ΙT
    Alkyd resins
    RL: USES (Uses)
        (saffron oil-modified, electrophotog. liq. developers with
       toners contg. poly(vinylcarbozole) derivs., pigments,
       and)
     9H-Carbazole, 9-ethenyl-, homopolymer, deriv.
ΙΤ
     RL: USES (Uses)
        (electrophotog. liq. developers with toners from
       pigments, polymers, and)
     2-Propenoic acid, polymers with carbon black and lauryl methacrylate
IT
     RL: USES (Uses)
        (graft, electrophotog. liq. developers with toners from
       brominated poly(vinylcarbozole), polymers, and)
IT
     25719-52-2
                  28062-60-4
     RL: USES (Uses)
        (electrophotog. liq. developers contg. poly(vinylcarbozole) derivs.,
       pigments, and)
TΤ
     76-03-9, uses and miscellaneous
     RL: USES (Uses)
        (electrophotog. liq. developers contg. toners from
       poly(vinylcarbozole) derivs., pigments, polymers, and)
     60880-55-9
ΙT
     RL: USES (Uses)
        (electrophotog. liq. developers from toners contg.
       poly(vinylcarbozole) derivs., pigments, and)
TΤ
     65-61-2
               2945-96-2
     RL: USES (Uses)
        (electrophotog. liq. developers with toners from brominated
       poly(vinylcarbozole), acrylic acid-lauryl methacrylate polymer and)
     147-14-8
ΤТ
     RL: USES (Uses)
        (electrophotog. liq. developers with toners from brominated
       poly(vinylcarbozole), acrylic polymer-modified carbon black, and)
ΤТ
     509-72-8
     RL: USES (Uses)
        (electrophotog. liq. developers with toners from brominated
       poly(vinylcarbozole), polymers, and)
                                        33270-70-1 60834-99-3
                           6253-10-7
ΙT
     569-64-2
               2475-46-9
     RL: USES (Uses)
        (electrophotog. liq. developers with toners from chlorinated
       poly(vinylcarbozole), alkyd resin, and)
IT
     548-62-9
     RL: USES (Uses)
        (electrophotog, lig. developers with toners from nitrated
       poly(vinylcarbozole), acrylic acid-lauryl methacrylate polymer, and)
ΙT
    128-80-3
    RL: USES (Uses)
        (electrophotog. liq. developers with toners from
       poly(vinylcarbozole) cyano derivs., polymers, and)
ΤТ
     548-62-9
     RL: USES (Uses)
        (electrophotog. liq. developers with toners from nitrated
       poly(vinylcarbozole), acrylic acid-lauryl methacrylate polymer, and)
RN
     548-62-9 HCAPLUS
CN
    Methanaminium, N-[4-[bis[4-(dimethylamino)phenyl]methylene]-2,5-
     cyclohexadien-1-ylidene]-N-methyl-, chloride (9CI) (CA INDEX NAME)
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● Cl-

	L #	Hits	Search Text	DBs	Time Stamp
1	L1	2548 9	gravure or rotogravure	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:15
2	L2	339	polymeric adj colorant	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:18
3	L3	0	2 near10 absorption near5 nm!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:15
4	L4	3321	(chromophore or dye or colorant) near10 absorption near5 nm!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:18
5	L5	274	1 and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:54
6	L6	254	chromophore near10 absorption near5 nm!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:19
7	L7	6	1 and 6	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:18
8	L9	2488 1	polymer\$2 near5 (chromophore or colorant or dye)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:19
9	L10	45	9 near10 absorption near5 nm!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:20
10	L11	153	5 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:28

	L #	Hits	Search Text	DBs	Time Stamp
11	L12	2046	x adj2 "80" or x80	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:45
12	L13	50	1 and 12	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:38
13	L15	2	("5231135").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:27
14	L16	0	15 and millijet	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:27
15	L17	0	15 and 12	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:27
16	L18	1	10 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:28
17	L19	35	1 near5 ink and absorption near5 nm!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:57
18	L20	6	(("6444021") or ("5719002") or ("4465800")).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:31
19	L21	0	12 and 20	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/09/ 08 11:31
20	L22	20	reactint adj violet	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/09/ 08 12:00

	L #	Hits	Search Text	DBs	Time Stamp
21	L23	4	22 and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:44
22	L24	27	12 and printing adj ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:46
23	L25	2464	(polyoxyalkylene or polyoxyethylene or polyoxypropylene) same (dye or chromophore)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:56
24	L26	169	1 and 25	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:53
25	L27	10	(("3157633") or ("4167510") or ("4284729") or ("4732570") or ("4507407")).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:46
26	L28	0	27 and absorption	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:54
27	L29	0	27 and nm!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:54
28	L30	0	27 and wavelength	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:54
29	L31	80	25 and absorption near5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:56
30	L32	604	1 and absorption near5 nm!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:56

	L #	Hits	Search Text	DBs	Time Stamp
31	L34	78	32 and chromophore	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:56
32	L33	36	32 and (colored near5 (resin or polymer))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:57
33	L35	109	(33 34) and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 11:57
34	L36	22	reactint adj2 violet	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:00
35	L37	2	36 not 22	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:01
36	L38	48	13 and solvent	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:02
37	L39	287	1 and maximum adj absorption	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:03
38	L40	132	1 and maximum adj absorption near10 (dye or chromophore or colorant)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:04
39	L41	1226	((523/160) or (523/161)).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:04
40	L42	10	41 and maximum adj absorption	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:09

	L#	Hits	Search Text	DBs	Time Stamp
41	L43	3	wo-9701605-\$.did. or wo-9109348-\$.did.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:12
42	L44	8	<pre>jp-2001106712-\$.did. or jp-10007709-\$.did. or jp-10001508-\$.did. or jp-09263726-\$.did. or wo-2003192956-\$.did.</pre>	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:14
43	L45	39	batlaw.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:13
44	L46	0	wo-3192956-\$.did.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:15
45	L47	3	polymeric adj violet adj colorant	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:22
46	L48	0	oxirane adj5 ether adj20 dicyanothiopene	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:22
47	L49	480	oxirane adj5 ether	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:22
48	L50	14	1 and 49	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:23
49	L51	1280	1 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:23
50	L53	3957 5	hue	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:24

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	L #	Hits	Search Text	DBs	Time Stamp
51	L54	110	"l.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:40
52	L55	37	54 and 53	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:26
53	L56	2	55 and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/09/ 08 12:27
54	L57	155	"a.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/09/ 08 12:28
55	L58	114	"b.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:28
56	L59	69	54 and 57 and 58	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:36
57	L60	3	1 and 59	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:29
58	L61	22	ink and 59	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:31
59	L62	4	54 and "h.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:36
60	L63	1545	1 and 9	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:32
61	L64	30	1 and 9	EPO; JPO; DERWENT	2003/09/ 08 12:33

	L#	Hits	Search Text	DBs	Time Stamp
62	L65	88	1 and toner	EPO; JPO; DERWENT	2003/09/ 08 12:35
63	L66	1881	1 and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:35
64	L67	368	1 near5 ink and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:35
65	L68	14	59 and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:36
66	L69	11	54 and ("h.sup.*" or hue) and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:38
67	L70	1682	1 and hue	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:38
68	L71	39	1 and hue	EPO; JPO; DERWENT	2003/09/ 08 12:38
69	L72	0	"l.sup.*"	USOCR	2003/09/ 08 12:40
70	L73		(("6086661") or ("5665504") or ("4812141")).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:40
71	L74	3	ch-638239-\$.did.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:43
72	L75	1545	1 and 9	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:44
73	L77	236	1 near5 ink and 9	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:44

	L #	Hits	Search Text	DBs	Time Stamp
74	L78	37	(polyoxyalkylene or polyoxyethylene or polyoxypropylene) and 77	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:45
75	L79	59	4284729.URPN.	USPAT	2003/09/ 08 12:46
76	L80	15	79 and 1	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:48
77	L81	2	("5062894").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:48
78	L83	55	ink.ti. and 4	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:54
79	L84	806	(polyoxyalkylene or polyoxyethylene or polyoxypropylene) and 9 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:56
80	L85	245	(polyoxyalkylene or polyoxyethylene or polyoxypropylene) and 9 and ink.ti.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:56
81	L86	3	85 and absorption near5 nm!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 08 12:57

	L #	Hits	Search Text	DBs	Time Stamp
1	L1	1001	reactint adj5 violet or x80 or x adj "80"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:39
2	L2	1174 8	gravure and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:39
3	L3	23	1 and 2	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:40
4	L4	14	toner nearl0 maximum adj absorption	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:42
5	L6	1	4 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:42
6	L7	9	polymer\$2 near3 (colorant or dye) near10 maximum adj absorption	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:56
7	L8	86	(colorant or dye) near10 maximum adj absorption and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:06
8	L9	3551	magenta adj toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:46
9	L10	0	9 same chromophore	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:46
10	L11	2	9 and chromophore	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:49

	L #	Hits	Search Text	DBs	Time Stamp
11	L12	8	(("5231135") or ("5310887") or ("4812141") or ("5766268")).PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:50
12	L13	0	12 and magenta	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:50
13	L14	0	violet near10 maximum adj absorption and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:51
14	L15	23	violet near10 maximum adj absorption	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:50
15	L16	0	12 and maximum adj absorption and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:01
16	L17	2015 2	colored near5 (polymer or resin) or polyoxyalkylene near5 colorant	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:52
17	L19	192	17 and maximum adj absorption	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:02
18	L20	539	polymer\$2 near3 (colorant or dye) and maximum adj absorption	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:57
19	L21	70	20 and chromophore	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:58
20	L22	185	polymer\$2 near3 (colorant or dye) and maximum adj absorbance	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 10:57

	L #	Hits	Search Text	DBs	Time Stamp
21	L23	45	22 and chromophore	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/
22	L25	0	12 and maximum adj absorption	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/
23	L24	1	12 and maximum adj absorbance	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:01
24	L26	11	(colorant or dye) near10 maximum adj absorbance and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:02
25	L27	62	17 and maximum adj absorbance	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:04
26	L28	2	("6479647").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:04
27	L30	0	29 and gravure	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:04
28	L29	2	28 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:04
29	FAM ILY	1	2003-352082.NRAN.	DERWENT	2003/09/ 09 11:05
30	L32		chromophore near10 maximum adj (absorption or absorbance) and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:07
31	L33	44	chromophore near10 maximum adj (absorption or absorbance)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:08

	L #	Hits	Search Text	DBs	Time Stamp
32	L34	4249	((polyoxyalkylene or polyoxyethylene or polyoxypropylene or alkoxylated or ethoxylated or polyalkyleneoxy or polyethyleneoxy or polypropyleneoxy) same (dye or chromophore))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:58
33	L36	427	34 and magenta	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:08
34	L35	69	34 and maximum adj (absorption or absorbance)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:15
35	L37	312	36 and (ink or toner)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:12
36	L38	1056	((polyoxyalkylene or polyoxyethylene or polyoxypropylene or alkoxylated or ethoxylated or polyalkyleneoxy or polyethyleneoxy or polypropyleneoxy) near10 (dye or chromophore))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:57
37	L39	87	38 and magenta and (ink or toner)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:12
38	L40	188	2 and maximum adj (absorption or absorbance)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:22
39	L41	1281	2 and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:22

	L #	Hits	Search Text	DBs	Time Stamp
40	L42	324	gravure near5 ink and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:22
41	L43	530	toner and maximum adj (absorption or absorbance)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:38
42	L44	40	43 and chromophore	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:29
43	L45	2	("5886091").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:29
44	L46	12	("3213058"   "3278486" "3928292"   "4284729" "4619990"   "4666819" "4820601"   "4831109" "4985528"   "5176745"   "5194463"   "5389130").PN.		2003/09/ 09 11:37
45	L47	3	46 and (absorption or absorbance)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:43
46	L48	2	("5194463").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:43
47	L49	1	48 and (absorption or absorbance)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:54
48	L50	2	("4284729").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:54
49	L51	2	("4666819").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:54

	L #	Hits	Search Text	DBs	Time Stamp
50	L52	2	51 and (absorption or absorbance)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:54
51	L53	0	(polyoxyalkylene or polyoxyethylene or polyoxypropylene or alkoxylated or ethoxylated or polyalkyleneoxy or polyethyleneoxy or polypropyleneoxy) and 52	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:58
52	L54	1056	((polyoxyalkylene or polyoxyethylene or polyoxypropylene or alkoxylated or ethoxylated or polyalkyleneoxy or polyethyleneoxy or polypropyleneoxy) near10 (dye or chromophore))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 11:59
53	L56	1474	(polyoxypropylene or polypropyleneoxy) near10 (majority or amount or number)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:01
54	L57	1	55 and 56	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:00
55	L58	25	(polyoxypropylene or polypropyleneoxy) and 55	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:00
56	L55	264	54 and ink	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:03
57	L59	13	55 and (eo! near3 po!)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:06

	L #	Hits	Search Text	DBs	Time Stamp
58	L60	2	("5176745").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:05
59	L61	1	60 and eo! and po!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:08
60	L62	14	55 and eo! and po!	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:08
61	L64	43	2 and 1 and hue adj angle	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:17
62	L67	4	ink and "l.sup.*" and hue adj angle	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:16
63	L68	0	ink and low near5 hue adj angle	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:16
64	L69	4	ink and "L.sup.*" and hue adj angle	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:16
65	L71	0	2 and "a.sub.*" and "b.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:16
66	L72	1	2 and cielab	EPO; JPO; DERWENT	2003/09/ 09 12:17
67	L73	51	2 and (lightness or brightness) and hue adj angle	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:17
68	L75	59	2 and ("l.sup.*" or "a.sub.*" or "b.sup.*" or hue adj angle or "h.sup.*")	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:23

	L #	Hits	Search Text	DBs	Time Stamp
69	L76	1	2 and l and "a.sup.*" and "b.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:35
70	L77	3	2 and "l.sup.*" and "a.sup.*" and "b.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:27
71	L78	22	ink and "l.sup.*" and "a.sup.*" and "b.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:28
72	L80	8	54 and ("l.sup.*" or "a.sup.*" or "b.sup.*" or hue adj angle or "h.sup.*")	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:31
73	L81	3	2 and "a.sup.*" and "b.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:30
74	L82	58	2 and (hue adj angle or "h.sup.*")	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:32
75	L83	1	2 and "L" and "a.sup.*" and "b.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:35
76	L84	2	("5886091").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:35
77	L85	0	84 and "a.sup.*" and "b.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:35
78	L86	0	84 and "a.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:35

	L #	Hits	Search Text	DBs	Time Stamp
79	L87	0	84 and "b.sup.*"	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:36
80	L88	1	84 and spectrodensitometer	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:36
81	L89	1	84 and a*	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:36
82	L90	214	2 and a* and b*	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:36
83	L91	201	90 and (l! or l*)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:39
84	L92	6	91 and 54	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:37
85	L93	67	2 and (l! or l*) and (h* or hue adj angle)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:40
86	L94	2	93 and 54	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:40
87	<b>L</b> 95	125	(91 or 93) and (toner or 54 or polymer\$4 near5 (colorant or dye))	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:55
88	L96	129	2 and cielab	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:44

	L #	Hits	Search Text	DBs	Time Stamp
89	L97	7	96 and 54	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:44
90	L98	39	96 and toner	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:44
91	L99	29	2 and 54	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:57
92	L10	2	("5176745").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:58
93	L10 1	27	99 and (pigment or dye)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB	2003/09/ 09 12:58